

## Webinar

Mobility and Access: Infrastructure and Land Use Exchange

Date: June 16, 2022

00:00:04> 00:00:07:	Well, well, thank you so much for joining today we're
00:00:07> 00:00:12:	we're. I'm Paul Angelo and we the Curtis Infrastructure
	initiative.
00:00:12> 00:00:15:	And as we kind of get rolling here, there's a
00:00:15> 00:00:19:	chat feature so I'd love it. If you you started
00:00:19> 00:00:23:	putting your name into the chat and where you're from
00:00:23> 00:00:26:	so people can get a sense of actually where you're
00:00:26> 00:00:30:	located and say hi and this is something that will
00:00:30> 00:00:32:	be turned on throughout.
00:00:32> 00:00:36:	The presentation today, but this really is the third series
00:00:36> 00:00:40:	of a meeting series of meetings really intended to bring
00:00:40> 00:00:45:	together you a line members. You alive, staff, global experts,
00:00:45> 00:00:50:	and other participants to talk about infrastructure, investment and the
00:00:50> 00:00:51:	format really is.
00:00:51> 00:00:53:	Intended to be a fun and.
00:00:53> 00:00:56:	Hopefully joyful way to have a conversation in this virtual
00:00:57> 00:01:00:	environment that we're we're mostly living in at this point,
00:01:00> 00:01:02:	and there will be initial.
00:01:02> 00:01:06:	Presentation by two really outstanding speakers here at the donning
00:01:07> 00:01:10:	and Yvonne Young and followed by a moderated conversation led
00:01:10> 00:01:13:	by a Brandon Palanker who you can all see with
00:01:13> 00:01:17:	their videos on right now, and I really encourage you
00:01:17> 00:01:20:	all to join the conversation. And so initially in the
00:01:20> 00:01:24:	phone call we're going to have the speakers with just
00:01:24> 00:01:27:	their their video on, but as they kind of wrap
00:01:27> 00:01:30:	up their initial comments going to allow for everyone to
00:01:30> 00:01:32:	be able to turn on the videos.

00:01:32> 00:01:35:	They like to speak as well as also throughout the
00:01:35> 00:01:39:	entire conversation. You're you're able to use the chat
	function
00:01:39> 00:01:43:	throughout this, but for those of you that don't know
00:01:43> 00:01:47:	the Curtis Infrastructure initiative was logged in 2020 through a
00:01:47> 00:01:50:	generous donation by the state of Jim Curtis Aulos, trustee,
00:01:50> 00:01:54:	who believed that infrastructure and land use processes shape how
00:01:55> 00:01:57:	we live, how we work and how we move goods
00:01:57> 00:02:01:	and services. This understanding of the link connecting real estate
00:02:01> 00:02:02:	development.
00:02:02> 00:02:06:	Venues and infrastructure investment drives the focus of this initiative
00:02:06> 00:02:09:	on building capacity and communities across the United States and
00:02:09> 00:02:13:	the globe to create more equitable and resilient infrastructure investments
00:02:13> 00:02:16:	that enhance long term community value. To accomplish this, we
00:02:16> 00:02:19:	aim to build a movement of which you're all participants
00:02:19> 00:02:22:	that grows the tables and creates new ones through global
00:02:22> 00:02:26:	and strategic partnerships, provides technical assistance and capacity building at
00:02:26> 00:02:29:	the local level and then acts as a feedback loop
00:02:29> 00:02:32:	to promote the most innovative and effective best practices.
00:02:32> 00:02:35:	But really, one of our main goals is to break
00:02:35> 00:02:38:	down a lot of the silos that exist within the
00:02:38> 00:02:42:	infrastructure world and based on a yulie Global Member survey
00:02:42> 00:02:46:	that we had events and conversations like this one District
00:02:46> 00:02:50:	Council grants and other activities, let us identify about five
00:02:50> 00:02:53:	key areas for utilized focus on this topic, and we're
00:02:53> 00:02:57:	working in for today's conversation. We're really going to be
00:02:57> 00:03:00:	focusing on the second section that we need to invest
00:03:00> 00:03:03:	in our public transportation mobility.
00:03:03> 00:03:07:	And access because increasing economic opportunities, social interactions and mobility
00:03:07> 00:03:12:	is really essential. Public transportation provides the regional framework for
00:03:12> 00:03:16:	compact people centric Urban Development, naval significant real estate, and
00:03:16> 00:03:20:	value creation opportunities, and then mitigates climate change. Public transportation

00:03:20> 00:03:23:	should be a frequent, reliable and accessible and for more
00:03:23> 00:03:26:	on this I'm now going to turn it over to
00:03:26> 00:03:29:	Brandon Palanker, our moderator, who is a recognized leader in
00:03:29> 00:03:33:	downtown revitalization, mixed use development and public engagement.
00:03:33> 00:03:36:	Who has for nearly 20 years, played a key role
00:03:36> 00:03:39:	in the development of over an entitlement of over 15
00:03:39> 00:03:43:	million square feet of mixed use development, representing more than
00:03:43> 00:03:47:	12 billion in development potential. So as a real expert,
00:03:47> 00:03:50:	he's a true believer in in the triple bottom line
00:03:50> 00:03:54:	of social, environmental and economic responsibility. With that, and with
00:03:54> 00:03:57:	that, I want to turn it over to you, Brandon,
00:03:57> 00:04:00:	and thank you so much for a moderating this conversation.
00:04:01> 00:04:04:	Thank you so much for for having me Paul and
00:04:04> 00:04:07:	I would like to thank everyone who is in attendance
00:04:07> 00:04:10:	here in person and those who might be a viewing
00:04:10> 00:04:12:	us down the road as we were recording this and
00:04:12> 00:04:16:	want to welcome everyone to today's rendition of the Urban
00:04:16> 00:04:20:	Land Institute's next infrastructure and Land use exchange, increasing mobility
00:04:20> 00:04:23:	and access. Paul gave us sort of an overview of
00:04:23> 00:04:26:	the program, so I'm not going to sort of reiterate
00:04:26> 00:04:30:	that I'm Brandon Polanka, as he had mentioned president of
00:04:30> 00:04:31:	three BL strategies, and.
00:04:31> 00:04:35:	Development also happened to be chair of Yulis TOTD council
00:04:35> 00:04:39:	here in Dallas Fort Worth and an avowed urbanist. So
00:04:39> 00:04:42:	it really is my pleasure to join you today to
00:04:42> 00:04:45:	moderate what I expect to be an informative and engaging
00:04:45> 00:04:50:	discussion on how we can better leverage ongoing investments in
00:04:50> 00:04:55:	infrastructure to foster more positive social, environmental and economic outcomes.
00:04:55> 00:04:59:	And this is an especially opportune time for this discussion.
00:04:59> 00:05:01:	We have an international audience.
00:05:02> 00:05:04:	Present today and many of our viewers are from the
00:05:04> 00:05:08:	United States, whereas most if not everyone knows. We now
00:05:08> 00:05:12:	have the largest infrastructure investment in a generation underway, while
00:05:12> 00:05:16:	our friends in Canada are witnessing significant investments in their

00:05:16> 00:05:18:	own right. And we have speakers from each of those
00:05:19> 00:05:22:	nations bringing not only a North American perspective to the
00:05:22> 00:05:26:	table, but deep experience and knowledge gained from efforts across
00:05:26> 00:05:26:	the globe.
00:05:27> 00:05:31:	The reality, though, is investment alone doesn't guarantee good results.
00:05:31> 00:05:34:	If we've learned anything over the past 70 years of
00:05:35> 00:05:38:	auto dependent land use and transportation policy, it's that what
00:05:38> 00:05:42:	may have worked one or two generations ago no longer
00:05:42> 00:05:46:	meets today's need, and furthermore, how we view infrastructure and
00:05:46> 00:05:49:	the development patterns it's invite. It invites we view that
00:05:49> 00:05:53:	through a different lens than even a decade ago. Issues
00:05:53> 00:05:57:	of equity of resiliency or paramount, the growing climate crisis
00:05:57> 00:05:58:	has become, and.
00:05:58> 00:06:00:	To becoming more acute daily now the good news is
00:06:01> 00:06:04:	we are learning and that's our opportunity here to learn
00:06:04> 00:06:07:	from one another and from examples across the globe of
00:06:07> 00:06:11:	these innovative approaches that break down those silos. As Paul
00:06:11> 00:06:14:	had mentioned, that once stood an hour away, we recognized
00:06:14> 00:06:18:	the need to bind together infrastructure, transportation policy, land use
00:06:18> 00:06:22:	place, making efforts to create long term real estate value
00:06:22> 00:06:25:	and more importantly to improve communities. So with that and
00:06:25> 00:06:28:	just before we launch a little housekeeping.
00:06:28> 00:06:31:	First, thanks again Paul. For you setting this up and
00:06:32> 00:06:35:	those at USLI for providing this forum and to our
00:06:35> 00:06:39:	speakers. Harriet Tregoning, director of Nemo and Yvonne Young, CEO
00:06:39> 00:06:43:	of SD Strategies. You'll notice these are some new names
00:06:43> 00:06:47:	as compared to some of the invites that had gone
00:06:47> 00:06:50:	out. So with that shuffling of the players I will
00:06:50> 00:06:54:	leave it to our esteemed panelists and speakers to give
00:06:54> 00:06:57:	a little background, you know on their experience.
00:06:57> 00:06:58:	Finally.
00:06:58> 00:07:01:	And as Paul had mentioned, this is intended to be
00:07:01> 00:07:04:	an interactive conversation. We don't want this, just us talking

00:07:04> 00:07:07:	at you, and certainly not just to each other. So
00:07:07> 00:07:10:	we're going to begin with the presentation by each of
00:07:10> 00:07:12:	our panelists, will have that followed by a Q&A where
00:07:12> 00:07:15:	I would love to hear your thoughts and your questions
00:07:15> 00:07:18:	with the topic at hand. And with that, let's get
00:07:18> 00:07:18:	going.
00:07:19> 00:07:21:	I know that I think I'm going to share my
00:07:21> 00:07:24:	screen, so I'm hearing that you're going. I'm the director
00:07:24> 00:07:27:	of an organization called the new Urban Mobility Alliance.
00:07:28> 00:07:32:	We basically exist because of something called the shared mobility
00:07:32> 00:07:35:	principles for livable cities. I am not Carlos Pardo who
00:07:35> 00:07:38:	was who was billed as going to as doing this
00:07:38> 00:07:41:	presentation. Carlos works for me and he has COVID for
00:07:41> 00:07:44:	the first time during this pandemic and it's in him
00:07:44> 00:07:46:	pretty hard, so I do what a lot of what
00:07:46> 00:07:49:	a lot of organizations are doing. I'm filling in for
00:07:49> 00:07:52:	Carlos, but the good news is I love this topic
00:07:52> 00:07:55:	of mobility hubs, and I worked actively with Carlos on
00:07:55> 00:07:58:	all the projects that we're going to talk to you
00:07:58> 00:07:59:	about.
00:07:59> 00:07:59:	Today
00:08:01> 00:08:04:	so let me start with the big picture and I
00:08:04> 00:08:07:	think that Brandon laid some of it out for you.
00:08:07> 00:08:12:	We are making the biggest infrastructure investment in a generation
00:08:12> 00:08:15:	in the US, huge in Canada, huge in a lot
00:08:15> 00:08:18:	of other places. It's \$1.2 trillion and more than half
00:08:18> 00:08:21:	of all that money is going to be going to
00:08:21> 00:08:22:	transportation.
00:08:22> 00:08:23:	Infrastructure.
00:08:23> 00:08:27:	So that seems like really great news, right? Except we
00:08:27> 00:08:29:	have very little.
00:08:30> 00:08:34:	High speed, high frequency fixed guideway transit in the US
00:08:34> 00:08:38:	compared to lots of other parts of the world. And
00:08:38> 00:08:40:	this money is is kind of a drop in the
00:08:40> 00:08:44:	bucket for for big rail systems to be started in
00:08:44> 00:08:47:	a heck of a lot of places. We also have
00:08:47> 00:08:51:	a very low density development pattern in most of the
00:08:51> 00:08:54:	US with a lot of single use, parts of our
00:08:54> 00:08:58:	communities. So we really have to be smart about how
00:08:58> 00:09:01:	we use this infrastructure investment.
00:09:01> 00:09:03:	And how we use some of the things that Brandon

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00:09:03> 00:09:07:	mentioned, including land use and partnerships with land owners to
00:09:07> 00:09:11:	really get the the most mobility and access we possibly
00:09:11> 00:09:14:	can. And the most walkable, livable communities that we can
00:09:14> 00:09:17:	out of the investments we're going to make. So I'm
00:09:17> 00:09:20:	going to talk to you today a little bit about
00:09:20> 00:09:23:	something I would call next generation of. Excuse me, the
00:09:23> 00:09:27:	next generation of of what you all know is transitioning
00:09:27> 00:09:30:	and development and that's something called mobility hubs.
00:09:31> 00:09:34:	Mobility hubs are really about.
00:09:37> 00:09:42:	Places nodes of of convenience, and access to different
00:09:43> 00:09:48:	modes of transportation that that can exist in many, many
00:09:48> 00:09:52:	parts of a community. The idea is that you look
00:09:52> 00:09:57:	at your existing high speed, high density transit networks and
00:09:58> 00:10:01:	what you try to do is find ways to.
00:10:02> 00:10:05:	To create new new nodes, a network of new nodes
00:10:05> 00:10:09:	that will put people within a convenient distance of that
00:10:09> 00:10:12:	high speed high frequency transit line.
00:10:14> 00:10:17:	So a walking distance is typically about 1/3 of a
00:10:17> 00:10:21:	mile from most people, and most people aren't going to
00:10:21> 00:10:23:	walk even a half a mile or a mile to
00:10:23> 00:10:27:	to transit. So how can we use the proliferation of
00:10:27> 00:10:31:	all kinds of transportation options from bike share system to
00:10:31> 00:10:35:	electric bikes and scooters to to ride? Hailing to car
00:10:35> 00:10:40:	sharing all these different ways of getting people connected
00:10:40> 00:10:43:	to
00:10:40> 00:10:43:	that high speed transit and at the same time use land use.
00:10:44> 00:10:47:	And convenience to also enable people to meet some of
00:10:47> 00:10:47:	their other daily trips.
00:10:50> 00:10:55:	This is an illustration of a reimagined Walnut Walmart parking
00:10:55> 00:10:58:	lot right, and you can see that there's still parking,
00:10:58> 00:10:30:	but now there's a lot of other activity on this
00:10:30 ==> 00:11:02:	site.
00:11:02> 00:11:07:	What makes a mobility hub it it? It really depends
00:11:07> 00:11:10:	on on when and where, but most people agree two
00:11:10> 00:11:14:	or more of the following things. Car share electric or
00:11:14> 00:11:17:	a regular open membership model or an amenity fleet that's
00:11:17> 00:11:21:	reserved for building owners, but a lot of places are
00:11:21> 00:11:24:	doing that in order to avoid having to provide more
00:11:24> 00:11:29:	parking. Expensive structured parking pick up and drop off
JJ. 111.2-7 JJ. 111.2J.	zones

00:11:29> 00:11:33:	for ride hailing and deliveries. Shared bike shared scooters are
00:11:33> 00:11:34:	flexible.
00:11:34> 00:11:37:	Infrastructure that might make the use of the curb variable
00:11:37> 00:11:40:	depending on the time of day and this is important
00:11:40> 00:11:45:	for our development audience. Relatively higher development density and this
00:11:45> 00:11:48:	is a reason this is an amenity you're providing to
00:11:48> 00:11:51:	a community and part of a justification why that higher
00:11:51> 00:11:55:	densities that higher density is necessary in a project.
00:11:57> 00:12:00:	So what do you consider if you want to lay
00:12:00> 00:12:03:	out a network like this, you have to look at
00:12:03> 00:12:06:	it as a system, so a single mobility hub in
00:12:06> 00:12:09:	a single location doesn't make a lot of sense. Transit
00:12:09> 00:12:13:	agencies who are often our partners in this work are
00:12:13> 00:12:17:	really interested in growing their ridership and expanding the use
00:12:17> 00:12:21:	of transit without necessarily having to build out a big
00:12:21> 00:12:24:	expensive new network. So the the the big picture on
00:12:24> 00:12:26:	on the entire network.
00:12:26> 00:12:29:	Where it makes sense to put people in proximity to
00:12:29> 00:12:30:	high speed high density.
00 40 00 . 00 40 00	Existing transit service. Whether you're in the way of
00:12:32> 00:12:36:	important
00:12:32> 00:12:36: 00:12:36> 00:12:40:	
	important destinations or important concentrations of the origins of
00:12:36> 00:12:40:	important destinations or important concentrations of the origins of tricks, a variety of transportation services, the placemaking
00:12:36> 00:12:40: 00:12:40> 00:12:45:	important destinations or important concentrations of the origins of tricks, a variety of transportation services, the placemaking opportunity in real estate.
00:12:36> 00:12:40: 00:12:40> 00:12:45: 00:12:46> 00:12:49:	important destinations or important concentrations of the origins of tricks, a variety of transportation services, the placemaking opportunity in real estate. Because if you can't provide those services. If you can't
00:12:36> 00:12:40: 00:12:40> 00:12:45: 00:12:46> 00:12:49: 00:12:49> 00:12:53:	important destinations or important concentrations of the origins of tricks, a variety of transportation services, the placemaking opportunity in real estate. Because if you can't provide those services. If you can't provide that convenience and if so and often, you're talking
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00:12:36> 00:12:40:  00:12:40> 00:12:45:  00:12:46> 00:12:49:  00:12:49> 00:12:53:  00:12:53> 00:12:57:  00:12:57> 00:13:00:  00:13:00> 00:13:05:  00:13:05> 00:13:06:  00:13:11> 00:13:15:  00:13:15> 00:13:15:	important destinations or important concentrations of the origins of tricks, a variety of transportation services, the placemaking opportunity in real estate. Because if you can't provide those services. If you can't provide that convenience and if so and often, you're talking about a real estate partner who's offering parts you know, maybe some of their their land or their parking for. For for bike parking. Or car charging for things that would bring people to this destination. The other considerations are that most of the trips we take, even in our very part dependent society are short. You know, less than you know, the the majority
00:12:36> 00:12:40:  00:12:40> 00:12:45:  00:12:46> 00:12:49:  00:12:49> 00:12:53:  00:12:53> 00:12:57:  00:12:57> 00:13:00:  00:13:00> 00:13:05:  00:13:05> 00:13:06:  00:13:11> 00:13:15:  00:13:15> 00:13:15:  00:13:15> 00:13:21:	important destinations or important concentrations of the origins of tricks, a variety of transportation services, the placemaking opportunity in real estate. Because if you can't provide those services. If you can't provide that convenience and if so and often, you're talking about a real estate partner who's offering parts you know, maybe some of their their land or their parking for. For for bike parking. Or car charging for things that would bring people to this destination. The other considerations are that most of the trips we take, even in our very part dependent society are short. You know, less than you know, the the the majority of trips that are taken are under 3 miles and
00:12:36> 00:12:40:  00:12:40> 00:12:45:  00:12:46> 00:12:49: 00:12:49> 00:12:53: 00:12:53> 00:12:57: 00:12:57> 00:13:00: 00:13:00> 00:13:02: 00:13:05> 00:13:06: 00:13:07> 00:13:11: 00:13:11> 00:13:15: 00:13:15> 00:13:21: 00:13:21> 00:13:25:	important destinations or important concentrations of the origins of tricks, a variety of transportation services, the placemaking opportunity in real estate. Because if you can't provide those services. If you can't provide that convenience and if so and often, you're talking about a real estate partner who's offering parts you know, maybe some of their their land or their parking for. For for bike parking. Or car charging for things that would bring people to this destination. The other considerations are that most of the trips we take, even in our very part dependent society are short. You know, less than you know, the the majority of trips that are taken are under 3 miles and still almost all of the trips that are taken. In

00:13:37> 00:13:38:	freedom to give up.
00:13:38> 00:13:41:	One of their vehicles, which is a huge savings and
00:13:41> 00:13:44:	as we enter these kind of troubled economic times, I
00:13:44> 00:13:47:	think you'll be seeing a lot of people looking for
00:13:47> 00:13:50:	ways to economize until they can be certain that they
00:13:50> 00:13:54:	weather this. This economic storm. Sprinkle whatever it might be.
00:13:55> 00:13:59:	So flexibility and trip distance is what you get with
00:13:59> 00:14:03:	mobility hubs. You get the opportunities to to use a
00:14:03> 00:14:06:	lot of these modes on the left hand side.
00:14:07> 00:14:11:	Depending on your what's available in your community and how
00:14:11> 00:14:13:	far people have to go.
00:14:15> 00:14:21:	Different modes are typically covering. They typically cover different distances.
00:14:21> 00:14:24:	Obviously automobiles are used.
00:14:25> 00:14:30:	Especially for long tricks, bicycles are typically 4 miles or
00:14:30> 00:14:34:	less in duration, but if you have an electric bike,
00:14:34> 00:14:37:	the trips are very often considerably longer.
00:14:39> 00:14:43:	Cargo bikes with their heavier loads are typically 2 miles.
00:14:43> 00:14:46:	People walk 1/3 to 1/6 of a mile, typically on
00:14:46> 00:14:48:	foot, so that gives you a sense of what kind
00:14:48> 00:14:52:	of mix of transportation choices you might want it to
00:14:52> 00:14:56:	have. Depending on where you're likely destinations are that people
00:14:56> 00:14:59:	are trying to get to transit, but maybe other things
00:14:59> 00:15:01:	that are convenient in nearby.
00:15:02> 00:15:02:	Umm?
00:15:03> 00:15:07:	The level of land use mix also makes a difference
00:15:07> 00:15:11:	in terms of what kinds of transportation are feasible and
00:15:12> 00:15:15:	and and how and how intense the uses might be.
00:15:16> 00:15:17:	Umm?
00:15:18> 00:15:20:	I think the key here is is if you want
00:15:20> 00:15:23:	to talk about a mobility hub system, you need to
00:15:23> 00:15:25:	be talking to three people in your city. You need
00:15:25> 00:15:28:	to be talking to your transit agency and have them
00:15:28> 00:15:31:	as a partner. You need to be talking to your
00:15:31> 00:15:34:	local government, especially on the two parts of the local
00:15:34> 00:15:37:	government. Maybe the three parts of the local local government,
00:15:38> 00:15:41:	the deal with economic development that deal with land use
00:15:41> 00:15:44:	and zoning, and the deal with the public space the
00:15:44> 00:15:46:	right of way. So those are three agencies that you

00:15:46> 00:15:48:	want to have as part of your.
00:15:48> 00:15:52:	Conversation as well as the transit agency and I and
00:15:52> 00:15:56:	the communities that we've worked in. And I'll tell you
00:15:56> 00:15:59:	a little bit more about that later. We've also often
00:15:59> 00:16:04:	organized a large groups of stakeholders in any given community.
00:16:04> 00:16:08:	There's a pretty significant percentage of households that, for a
00:16:08> 00:16:14:	variety of reasons, age, ability, finances, convenience, don't own automobiles,
00:16:14> 00:16:18:	and there are real constituents for transportation options.
00:16:18> 00:16:22:	Transportation choices the fact that automobile ownership in a lot
00:16:22> 00:16:25:	of our cities is a is a economic hurdle that
00:16:25> 00:16:28:	people have to surmount in order to put 1 foot
00:16:28> 00:16:31:	on the economic ladder means that when you're talking about
00:16:31> 00:16:36:	equity and you're talking about increasing employment and workforce participation,
00:16:36> 00:16:39:	this is a conversation a lot of employers are very
00:16:39> 00:16:43:	interested in, so this relatively low cost way of expanding
00:16:43> 00:16:46:	the reach of existing transit is of interest to those
00:16:46> 00:16:47:	constituents.
00:16:47> 00:16:47:	As well.
00:16:48> 00:16:54:	Everyone knows about TPOD about about fixed guideway transit systems
00:16:48> 00:16:54: 00:16:54> 00:16:57:	,
	transit systems
00:16:54> 00:16:57:	transit systems and the very natural, often very.  Excellent development that occurs around it. Think of mobility
00:16:54> 00:16:57: 00:16:59> 00:17:04:	transit systems and the very natural, often very.  Excellent development that occurs around it. Think of mobility hubs
00:16:54> 00:16:57: 00:16:59> 00:17:04: 00:17:04> 00:17:07:	transit systems and the very natural, often very.  Excellent development that occurs around it. Think of mobility hubs as a next generation of Tod that is connected to
00:16:54> 00:16:57: 00:16:59> 00:17:04: 00:17:04> 00:17:07: 00:17:08> 00:17:11:	transit systems and the very natural, often very.  Excellent development that occurs around it. Think of mobility hubs as a next generation of Tod that is connected to some of this high speed service, but that can start
00:16:54> 00:16:57: 00:16:59> 00:17:04: 00:17:04> 00:17:07: 00:17:08> 00:17:11: 00:17:11> 00:17:15:	transit systems and the very natural, often very.  Excellent development that occurs around it. Think of mobility hubs as a next generation of Tod that is connected to some of this high speed service, but that can start in a location that doesn't have that service but instead provides those necessary connections and begins to build
00:16:54> 00:16:57: 00:16:59> 00:17:04:  00:17:04> 00:17:07: 00:17:08> 00:17:11: 00:17:11> 00:17:15: 00:17:15> 00:17:20:	transit systems and the very natural, often very.  Excellent development that occurs around it. Think of mobility hubs as a next generation of Tod that is connected to some of this high speed service, but that can start in a location that doesn't have that service but instead provides those necessary connections and begins to build the density
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00:16:54> 00:16:57: 00:16:59> 00:17:04:  00:17:04> 00:17:07: 00:17:08> 00:17:11: 00:17:11> 00:17:15: 00:17:20> 00:17:20:  00:17:24> 00:17:29:	transit systems and the very natural, often very.  Excellent development that occurs around it. Think of mobility hubs as a next generation of Tod that is connected to some of this high speed service, but that can start in a location that doesn't have that service but instead provides those necessary connections and begins to build the density in those locations that that make these locations the site of future fixed guideway service and increases in transit service.
00:16:54> 00:16:57: 00:16:59> 00:17:04:  00:17:04> 00:17:07: 00:17:08> 00:17:11: 00:17:11> 00:17:15: 00:17:20> 00:17:20:  00:17:24> 00:17:29:  00:17:29> 00:17:33:	transit systems and the very natural, often very.  Excellent development that occurs around it. Think of mobility hubs as a next generation of Tod that is connected to some of this high speed service, but that can start in a location that doesn't have that service but instead provides those necessary connections and begins to build the density in those locations that that make these locations the site of future fixed guideway service and increases in transit service.  Not every city, but a lot of our cities in the US are reconsidering single family zoning as
00:16:54> 00:16:57: 00:16:59> 00:17:04:  00:17:04> 00:17:07: 00:17:08> 00:17:11: 00:17:11> 00:17:15: 00:17:20> 00:17:20:  00:17:24> 00:17:24: 00:17:24> 00:17:33: 00:17:33> 00:17:38:	transit systems and the very natural, often very.  Excellent development that occurs around it. Think of mobility hubs as a next generation of Tod that is connected to some of this high speed service, but that can start in a location that doesn't have that service but instead provides those necessary connections and begins to build the density in those locations that that make these locations the site of future fixed guideway service and increases in transit service.  Not every city, but a lot of our cities in the US are reconsidering single family zoning as exclusionary as
00:16:54> 00:16:57: 00:16:59> 00:17:04:  00:17:04> 00:17:07: 00:17:08> 00:17:11: 00:17:11> 00:17:15: 00:17:15> 00:17:20:  00:17:20> 00:17:24: 00:17:24> 00:17:29:  00:17:29> 00:17:33: 00:17:33> 00:17:38:	transit systems and the very natural, often very.  Excellent development that occurs around it. Think of mobility hubs as a next generation of Tod that is connected to some of this high speed service, but that can start in a location that doesn't have that service but instead provides those necessary connections and begins to build the density in those locations that that make these locations the site of future fixed guideway service and increases in transit service.  Not every city, but a lot of our cities in the US are reconsidering single family zoning as exclusionary as a big use of land, the majority of residential land

00:17:54> 00:17:58:	cities increasingly are looking to provide. So think of a
00:17:58> 00:17:59:	mobility.
00:17:59> 00:18:00:	As in that way?
00:18:03> 00:18:05:	So just as a couple of very quick graphics that
00:18:05> 00:18:09:	we're talking about looking for a density opportunity, that's
00.40.40 > 00.40.40.	one
00:18:10> 00:18:12:	and a half to three times that of a surrounding
00:18:12> 00:18:16:	area. If you're in a single family zone, that means
00:18:16> 00:18:19:	that might be three story, four story building. It's not
00:18:19> 00:18:23:	a skyscraper, it's nothing terrifying, but enough to be able
00:18:23> 00:18:26:	to maybe offer some retail and some services, as well
00:18:26> 00:18:30:	as that that transportation access to higher capacity, higher frequency
00:18:30> 00:18:31:	transportation.
00:18:32> 00:18:34:	A housing might be right there, or a block off.
00:18:34> 00:18:37:	You might also be looking at freight as one of
00:18:37> 00:18:40:	the service connections that you make the opportunity to pick
00:18:40> 00:18:43:	up and drop off packages, which is increasingly part of
00:18:43> 00:18:44:	our daily lives.
00:18:45> 00:18:48:	Mass transit corridor. You're either on it or you're near
00:18:48> 00:18:48:	it.
00:18:49> 00:18:53:	You can start with hubs at stations, but they're more
00:18:53> 00:18:56:	often going to be a bit away a few blocks
00:18:56> 00:18:59:	away from a station. And like I say, freight might
00:18:59> 00:19:02:	be right there or nearby housing also right there or
00:19:02> 00:19:06:	nearby with other services you you see here a couple
00:19:06> 00:19:10:	of other examples of where mobility hubs might be located
00:19:10> 00:19:14:	relative to transit. It's going to not typically be right
00:19:14> 00:19:17:	on a high speed line, but it'll be somewhere within
00:19:17> 00:19:20:	striking distance, and we have different tiers.
00:19:20> 00:19:24:	Different cities have decided that depending on the intensity of
00:19:24> 00:19:28:	development and the intensity of transportation and other services being
00:19:28> 00:19:32:	provided, it's it's useful to classify mobility hubs in different
00:19:32> 00:19:35:	tiers and and create a set of expectations on the
00:19:35> 00:19:38:	part of users of what kind of services you're likely
00:19:39> 00:19:41:	to find at different types of hubs.
00:19:42> 00:19:45:	So let me talk about some examples. I know that
00:19:45> 00:19:49:	we have someone from Minneapolis on the call and maybe
00:19:49> 00:19:52:	they'll be able to add a little bit more, but
00:19:52> 00:19:55:	most Minneapolis was one of the first cities in the
00:19:55> 00:19:59:	US to really start thinking about this way of augmenting

00:19:59> 00:20:02:	all that their existing transit networks and their hubs are
00:20:02> 00:20:06:	have the goal of increasing access to lower no carbon
00:20:06> 00:20:10:	transportation and particularly focusing on 1st and last mile
	options.
00:20:10> 00:20:13:	Hubs might include a a bus stop, a bench.
00:20:13> 00:20:18:	A designated bike and scooter share way findings, including electronic
00:20:18> 00:20:22:	travel time. So people have a sense of how long
00:20:22> 00:20:26:	they have to wait for access to that transit service.
00:20:26> 00:20:29:	We work with Pittsburgh who've installed.
00:20:31> 00:20:34:	Mobility halves on the street, so they're not relying on
00:20:34> 00:20:38:	developers or others who are providing the land, but they're
00:20:38> 00:20:41:	locating all of their mobility houses in the public right
00:20:41> 00:20:44:	of way Co. Located with transit stops, but not always
00:20:44> 00:20:48:	with their best transit. So sometimes they're they're suggesting your
00:20:48> 00:20:52:	people. You can wait and make two connections to get
00:20:52> 00:20:54:	to high speed transit, or you can hop on the
00:20:54> 00:20:58:	scooter and get to that high speed transit directly. Kind
00:20:58> 00:21:00:	of up to you so people can make decisions on
00:21:00> 00:21:01:	this.
00:21:01> 00:21:01:	Right?
00:21:02> 00:21:06:	They were using an app to connect people, and they've
00:21:06> 00:21:09:	done. They've done a lot of really cool videos to
00:21:09> 00:21:13:	reach members of the community about how, how fun it
00:21:13> 00:21:16:	would be to get around the city and this way
00:21:16> 00:21:20:	we work with Paul and folks in San Antonio, including
00:21:20> 00:21:23:	the transit system via to look at mapping a network
00:21:23> 00:21:27:	of mobility hubs in San Antonio, one of the fastest
00:21:27> 00:21:31:	growing cities in the US. So rapid growth means channeling
00:21:31> 00:21:32:	development into.
00:21:32> 00:21:36:	Patterns that are really sensible, so think about as a
00:21:36> 00:21:40:	city as growing. Also grow the transit service through mobility
00:21:40> 00:21:43:	hubs and you can see it might be messy. To
00:21:43> 00:21:46:	do this we use data and mapping and a lot
00:21:46> 00:21:50:	of input from community members about creating a set of
00:21:50> 00:21:54:	criteria and locations for hubs that that made the
00:21:54> 00:21:58:	most sense to serve the growing city of San Antonio
00:21:58> 00:22:02:	mobility hubs are found throughout the world, including places like.
00:22:03> 00:22:06:	Uh, the Netherlands at the Utrecht station. Carlos loved this
00:22:06> 00:22:10:	slide because it's got more bike parking than maybe any
00:22:10> 00:22:12:	place else in the world in one place and so

00:22:12> 00:22:15:	much bike use that they really have. They needed to
00:22:15> 00:22:20:	provide structured parking because otherwise the bikes were
	everywhere people
00:22:20> 00:22:23:	couldn't. Couldn't get to the rail stations in in other
00:22:24> 00:22:24:	places.
00:22:26> 00:22:30:	Like in Munich, this is an example of a mobility
00:22:30> 00:22:35:	hub with electric assist, three wheel and two wheel bikes
00:22:35> 00:22:40:	charging for a car sharing parking spaces for car sharing
00:22:40> 00:22:45:	and and spaces where electric vehicles can can charge. So
00:22:45> 00:22:49:	here a little bit less about the retail, in part
00:22:49> 00:22:55:	because in Munich there's a pretty dense mixed use development
00:22:55> 00:22:55:	pattern.
00:22:56> 00:22:59:	So the retail is a lot around you, but not
00:22:59> 00:23:03:	so much the transportation services. For all these new emerging
00:23:03> 00:23:07:	modes like SIG, very little little bit lovely city in
00:23:07> 00:23:11:	the former East Germany has amazing transit both. Both the
00:23:11> 00:23:15:	old legacy transit and a lot of new transit, and
00:23:15> 00:23:20:	there mobile stations have distinctive markings so that you can
00:23:20> 00:23:24:	spot them everywhere they have bike parking and bike rental.
00:23:24> 00:23:26:	Car sharing and electric.
00:23:24> 00:23:26: 00:23:26> 00:23:29:	Car sharing and electric.  Are charging so places where it might make sense to
00:23:26> 00:23:29:	Are charging so places where it might make sense to
00:23:26> 00:23:29: 00:23:29> 00:23:33:	Are charging so places where it might make sense to go and and run your errands by transit and come
00:23:26> 00:23:29: 00:23:29> 00:23:33: 00:23:33> 00:23:36:	Are charging so places where it might make sense to go and and run your errands by transit and come back when your car is charged. So with that Brandon
00:23:26> 00:23:29: 00:23:29> 00:23:33: 00:23:33> 00:23:36: 00:23:36> 00:23:40:	Are charging so places where it might make sense to go and and run your errands by transit and come back when your car is charged. So with that Brandon I'll I'll stop and I'll look forward to our conversation.
00:23:26> 00:23:29: 00:23:29> 00:23:33: 00:23:33> 00:23:36: 00:23:36> 00:23:40: 00:23:40> 00:23:41:	Are charging so places where it might make sense to go and and run your errands by transit and come back when your car is charged. So with that Brandon I'll I'll stop and I'll look forward to our conversation.  Thank you.
00:23:26> 00:23:29: 00:23:29> 00:23:33: 00:23:33> 00:23:36: 00:23:36> 00:23:40: 00:23:40> 00:23:41: 00:23:41> 00:23:45:	Are charging so places where it might make sense to go and and run your errands by transit and come back when your car is charged. So with that Brandon I'll I'll stop and I'll look forward to our conversation.  Thank you.  And as we switch, I really appreciate that Harriet and
00:23:26> 00:23:29: 00:23:29> 00:23:33: 00:23:33> 00:23:36: 00:23:36> 00:23:40: 00:23:40> 00:23:41: 00:23:41> 00:23:45: 00:23:45> 00:23:47:	Are charging so places where it might make sense to go and and run your errands by transit and come back when your car is charged. So with that Brandon I'll I'll stop and I'll look forward to our conversation.  Thank you.  And as we switch, I really appreciate that Harriet and is Yvonne gets ready to go and and folks you
00:23:26> 00:23:29: 00:23:29> 00:23:33: 00:23:33> 00:23:36: 00:23:36> 00:23:40: 00:23:40> 00:23:41: 00:23:41> 00:23:45: 00:23:45> 00:23:47: 00:23:47> 00:23:51:	Are charging so places where it might make sense to go and and run your errands by transit and come back when your car is charged. So with that Brandon I'll I'll stop and I'll look forward to our conversation.  Thank you.  And as we switch, I really appreciate that Harriet and is Yvonne gets ready to go and and folks you can start to think about your questions. If you want
00:23:26> 00:23:29: 00:23:29> 00:23:33: 00:23:33> 00:23:36: 00:23:36> 00:23:40: 00:23:40> 00:23:41: 00:23:41> 00:23:45: 00:23:45> 00:23:47: 00:23:47> 00:23:51: 00:23:51> 00:23:53:	Are charging so places where it might make sense to go and and run your errands by transit and come back when your car is charged. So with that Brandon I'll I'll stop and I'll look forward to our conversation. Thank you.  And as we switch, I really appreciate that Harriet and is Yvonne gets ready to go and and folks you can start to think about your questions. If you want to type them in, we'll do our best to keep
00:23:26> 00:23:29: 00:23:29> 00:23:33: 00:23:33> 00:23:36: 00:23:36> 00:23:40: 00:23:40> 00:23:41: 00:23:41> 00:23:45: 00:23:45> 00:23:47: 00:23:47> 00:23:51: 00:23:51> 00:23:53: 00:23:53> 00:23:57:	Are charging so places where it might make sense to go and and run your errands by transit and come back when your car is charged. So with that Brandon I'll I'll stop and I'll look forward to our conversation. Thank you.  And as we switch, I really appreciate that Harriet and is Yvonne gets ready to go and and folks you can start to think about your questions. If you want to type them in, we'll do our best to keep track of those and we'll get the conversation going shortly.
00:23:26> 00:23:29: 00:23:29> 00:23:33: 00:23:33> 00:23:36: 00:23:36> 00:23:40: 00:23:40> 00:23:41: 00:23:41> 00:23:45: 00:23:45> 00:23:47: 00:23:51> 00:23:51: 00:23:53> 00:23:57: 00:23:57> 00:24:01:	Are charging so places where it might make sense to go and and run your errands by transit and come back when your car is charged. So with that Brandon I'll I'll stop and I'll look forward to our conversation.  Thank you.  And as we switch, I really appreciate that Harriet and is Yvonne gets ready to go and and folks you can start to think about your questions. If you want to type them in, we'll do our best to keep track of those and we'll get the conversation going shortly. Hi everyone, I'm Yvonne young. I'm the CEO of SDG
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of 00:24:30 --> 00:24:33: our colleagues, and I see some of them. They are 00:24:33 --> 00:24:35: also on the call today, so they would also be 00:24:35 --> 00:24:38: able to contribute some of the observation. 00:24:39 --> 00:24:42: So this is about the city building story of Greater 00:24:42 --> 00:24:45: Toronto area. Why this is so significant? Because it's the 00:24:45 --> 00:24:49: second largest financial center in North America and what we 00:24:49 --> 00:24:52: are looking at infrastructure is really thinking about how we 00:24:52 --> 00:24:56: can position that to have a synergistic approach. In other 00:24:56 --> 00:24:59: words, by addressing one infrastructure it can also use that 00:24:59 --> 00:25:04: to address climate change, telecommunication and affordability. And there's some 00:25:04 --> 00:25:07: slight we're going to go through some of the kind 00:25:07 --> 00:25:10: of practical tests that we're going through at the moment. 00:25:11 --> 00:25:15: The scale of investment we're dealing with is \$62 billion 00:25:15 --> 00:25:19: for the whole entire city region in four different modes. 00:25:19 --> 00:25:24: It's getting implemented very, very quickly, so therefore we decided 00:25:24 --> 00:25:27: to focus in on how to look at the integrated 00:25:27 --> 00:25:32: with land users with these infrastructure and really, diving deep 00:25:32 --> 00:25:36: and understand. What are some of the challenges and some 00:25:36 --> 00:25:40: of the potential scalable solutions that we should be. 00:25:41 --> 00:25:43: Setting up the lights early on. So with that the 00:25:44 --> 00:25:47: overall land use is also changing, so we're looking at 00:25:47 --> 00:25:50: around 45,000 acre of mass transit station area, so all 00:25:50 --> 00:25:54: the municipality within the Greater Toronto area. They have a 00:25:54 --> 00:25:58: common deadline by September. They will need to divide not 00:25:58 --> 00:26:01: just the boundary but also the intensity of those that 00:26:01 --> 00:26:04: mixed use development along the transit line. 00:26:04 --> 00:26:07: And to us, I think this is a really a 00:26:07 --> 00:26:11: tremendous opportunity for us to make the shift because in 00:26:11 --> 00:26:14: Canada, two third of our communities is based on building 00:26:15 --> 00:26:18: around auto dependent suburb. So we're hoping that if this 00:26:18 --> 00:26:23: is successful we can really leverage transit infrastructure to make 00:26:23 --> 00:26:24: a major shift. 00:26:24 --> 00:26:26: If I if I can jump in real quick, I'm

**00:26:26 --> 00:26:29:** not sure if you've started. We don't see any slides

**00:26:29 --> 00:26:31:** you might be doing. Your introduction just want to let

00:26:31 --> 00:26:33: you know that your screen is not shared yet, which

**00:26:33 --> 00:26:35:** might be intentional, but just in case.

**00:26:36 --> 00:26:38:** OK yeah, I'm going to share the slides later on,

00:26:38> 00:26:41:	so the amount of population we are looking at growing
00:26:42> 00:26:45:	is the why. There's a good condition for these changes
00:26:45> 00:26:48:	because we're growing very quickly and also many of the
00:26:48> 00:26:52:	population they came from places that do not require driving,
00:26:52> 00:26:54:	but you're not towards. They are ready for this.
00:26:55> 00:26:58:	Culture shifts, so maybe what I'm going to do, I'm
00:26:58> 00:27:02:	going to, you know, quickly share the slides and use
00:27:02> 00:27:05:	that to kind of walk through some of the major
00:27:05> 00:27:09:	challenges and to see what the opportunities is. So this
00:27:09> 00:27:13:	is the map showing the Greater Toronto area and what
00:27:13> 00:27:16:	we're talking about earlier on in terms of \$62 billion
00:27:16> 00:27:20:	investment are the yellow dots and the red dots, so
00:27:20> 00:27:25:	those are the four different modes of rapid transit
	infrastructure.
00:27:25> 00:27:29:	Coming to the city region very correctly, what we are
00:27:29> 00:27:32:	working on as a research project with you are in
00:27:32> 00:27:37:	Toronto and calling from future infrastructure group as well is
00:27:37> 00:27:41:	thinking about what would be the ideal model for these
00:27:41> 00:27:45:	brown dots. So these brown dots are the mass transit
00:27:45> 00:27:49:	station area that I was talking about earlier around 25,000
00:27:49> 00:27:52:	acre in total and the reason why there is a
00:27:52> 00:27:55:	disconnect at the moment is we see that.
00:27:55> 00:27:59:	The children said infrastructure. Currently it seems to be underperforming,
00:27:59> 00:28:01:	so let me just see if I can go to
00:28:01> 00:28:02:	the next slide.
00:28:03> 00:28:06:	So one of the key missing piece we see that
00:28:06> 00:28:09:	need to be laid at the table is also bringing
00:28:09> 00:28:14:	up the micro mobility network, particularly the cycling network at
00:28:14> 00:28:18:	the regional scale and through our research we have conversation
00:28:18> 00:28:22:	with different party and we know that everybody is facing
00:28:22> 00:28:26:	the similar challenges. It's very hard at the local level
00:28:26> 00:28:31:	to do the high quality cycling infrastructure in a contiguous
00:28:31> 00:28:33:	way from day one, the funding.
00:28:33> 00:28:37:	That is piece meal. The design is piecemeal. The consultation
00:28:37> 00:28:42:	is very localized so that is really significantly impacting the
00:28:42> 00:28:47:	performance of the higher order transit. So from that standpoint,
00:28:47> 00:28:51:	this presentation hopefully going to really kind of draw the
00:28:51> 00:28:56:	lights on the clinic. Creative solution that potentially can
	upload

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00:28:56> 00:29:00:	some of these key micro infrastructure to to the upper
00:29:00> 00:29:03:	level of decision making. So what we see?
00:29:03> 00:29:07:	Is another challenges that we're facing these climate change. We
00:29:07> 00:29:10:	know that 60% of the issue of GG is due
00:29:10> 00:29:13:	to people driving. So what we've been working on as
00:29:13> 00:29:17:	a research is that we're trying to incubate. Is there
00:29:17> 00:29:21:	opportunity you can? We would take on a Community that
00:29:21> 00:29:25:	already have the political support already have the political vision
00:29:25> 00:29:29:	on the claim that the car free precincts, but what
00:29:29> 00:29:33:	it really means is that early on, providing the condition
00:29:33> 00:29:33:	that.
00:29:33> 00:29:37:	Residents and new business coming to this area, they don't
00:29:37> 00:29:40:	need to worry about spending their after tax money on
00:29:40> 00:29:44:	car infrastructure, car insurance, ownership of car. All that is
00:29:44> 00:29:49:	very very expensive. So that's another strategy from ever affordability
00:29:49> 00:29:52:	standpoint. But the key thing is that we want to
00:29:52> 00:29:55:	see if we can set the bar high so some
00:29:55> 00:29:58:	of the party is looking at. Is it possible to
00:29:58> 00:30:01:	really be tangible about model shifts? So in other words,
00:30:01> 00:30:04:	is it possible to achieve 75% of the short trip?
00:30:05> 00:30:08:	Is by walking and cycling and if we are able
00:30:08> 00:30:12:	to create a model of transit oriented communities that this
00:30:12> 00:30:16:	is achieving from day one that will be huge because
00:30:16> 00:30:20:	right now this doesn't exist. So on a policy standpoint
00:30:20> 00:30:24:	some of them is a party that is more progressive.
00:30:24> 00:30:28:	They have removed the minimum parking requirement but also at
00:30:28> 00:30:31:	the same time we know this is not good enough
00:30:32> 00:30:35:	for developer perspective. What is needed?
00:30:35> 00:30:38:	Is to drive the pedestrian foot traffic within mixed uses.
00:30:38> 00:30:41:	So in other words, what we see is that it
00:30:41> 00:30:44:	need to have a broader thinking, not just looking at
00:30:44> 00:30:48:	transit infrastructure, but looking at all the pieces of infrastructure
00:30:48> 00:30:49:	at the same time.
00:30:50> 00:30:53:	So this is very typical. If you go on Google
00:30:53> 00:30:56:	and just have a look at Canada, I think you
00:30:56> 00:31:00:	would notice there's a lot of area other than outside
00:31:00> 00:31:03:	of the downtown Toronto core area. You see a lot
00:31:03> 00:31:07:	of these. These are everywhere and the problem is that

00:31:07> 00:31:11:	many of the local and regional visit party their current
00:31:11> 00:31:15:	funding model and also the current capital and operational model
00:31:15> 00:31:20:	is continuing spending billions of dollars on other infrastructure. And
00:31:20> 00:31:21:	because of that.
00:31:21> 00:31:25:	They put a lot of constrained from resource standpoint, public
00:31:25> 00:31:29:	resource standpoint, but also create the conflict in terms of
00:31:30> 00:31:33:	design, so it makes it very challenging in terms of
00:31:33> 00:31:37:	the timing and the resources that is needed to design
00:31:37> 00:31:42:	the transit infrastructure that can really provide performance because you
00:31:42> 00:31:45:	have a lot of these disconnect. So what we want
00:31:45> 00:31:48:	to shed the light is that it's really now we
00:31:48> 00:31:51:	need to make the call and create the model that.
00:31:51> 00:31:56:	Our decision making model that early on you consider these
00:31:56> 00:31:59:	issue and try to avoid it now from a financial
00:31:59> 00:32:03:	standpoint, what we learned is that when we talk into
00:32:03> 00:32:06:	a public sector, the key is that OK? Is there
00:32:06> 00:32:10:	a way to optimize public resourcing to expedite decision making?
00:32:11> 00:32:14:	Don't cause any delay but also at the same time
00:32:14> 00:32:17:	we can bring the local community along. So this is
00:32:18> 00:32:21:	a classic example when we look at the number of
00:32:21> 00:32:22:	perspective.
00:32:22> 00:32:26:	It make no sense to accommodate growth by building a
00:32:26> 00:32:30:	new auto infrastructure that is going to cause you. You
00:32:30> 00:32:34:	know many times compared to the cause of new cycling
00:32:34> 00:32:40:	infrastructure. So another part is about behavior and expectation. So
00:32:40> 00:32:44:	this need a lot of both political and community support.
00:32:44> 00:32:50:	And really about articulating the expectation. In other words, instead
00:32:50> 00:32:52:	of saying that to avoid congestion.
00:32:52> 00:32:55:	We need to add more lanes but say congestion is
00:32:55> 00:32:58:	good because you are having growth so some of the
00:32:58> 00:33:02:	more progressive cities that we've been working with. This is
00:33:02> 00:33:07:	particularly what they articulate to their constituents.  Congestion is good
00:33:07> 00:33:10:	because the city is growing. We are shifting. We don't
00:33:10> 00:33:13:	want to lose our young people so therefore so this
00:33:13> 00:33:16:	is the illustration kind of showing. What if we do
00:33:16> 00:33:20:	business as usual? In other words, you're trying to make

00:33:20> 00:33:23:	all these coexist, and it's not making sense. It's not.
00:33:23> 00:33:27:	Working another part that we see in a in transit
00:33:27> 00:33:32:	infrastructure design is that during environmental assessment that is the
00:33:32> 00:33:36:	time when trying to align the. The goal to thinking
00:33:36> 00:33:40:	about what is the cross section design and there is
00:33:40> 00:33:44:	usually a big fight between goods movement. How much,
	how
00:33:44> 00:33:48:	many lanes are you retaining within the neighborhood?
00:33:50> 00:33:53:	How much space are you providing for high quality walking
00:33:53> 00:33:56:	and cycling? How are you going to deal with those
00:33:56> 00:34:00:	above grade and below grade infrastructure? So this is the
00:34:00> 00:34:03:	key that's connected. We see. So again, this is a
00:34:03> 00:34:07:	really great opportunity. That early on I think it should
00:34:07> 00:34:10:	shed the light and set it as a standard. Say
00:34:10> 00:34:14:	that it's absolutely very important to ensure the performance of
00:34:14> 00:34:17:	this billion dollars of rapid transit is to we have
00:34:17> 00:34:20:	to look at repurposing the traffic light and removing.
00:34:20> 00:34:23:	By some of the areas that we don't need to
00:34:23> 00:34:28:	create that conflict, and particularly using that from connectivity standpoint
00:34:28> 00:34:31:	like. In other words, instead of just looking at 1
00:34:31> 00:34:34:	corridor and one corridor at a time as a separate
00:34:35> 00:34:39:	transit project, but it's looking at the overall connectivity. So
00:34:39> 00:34:42:	how this connect with different mobility help? So these are
00:34:43> 00:34:46:	because the projects being you know, going very quickly these
00:34:46> 00:34:50:	are the disconnects that we see in our conversation with
00:34:50> 00:34:51:	different cities.
00:34:51> 00:34:55:	That they also see that major challenges. There are many
00:34:55> 00:34:59:	meetings, but very little decision being made because there are
00:34:59> 00:35:03:	many players and also the kind of broader picture is
00:35:03> 00:35:06:	not set. So ideally if early on can really kind
00:35:06> 00:35:09:	of shed that light and what we are planning to
00:35:09> 00:35:12:	do with our report is to provide for.
00:35:13> 00:35:17:	So some insights to inform the local government and letting
00:35:17> 00:35:20:	them know you know some of the key issues that
00:35:20> 00:35:22:	need to go back to rethink. Like for example how
00:35:23> 00:35:26:	do you set the party instead of balance, balance and
00:35:26> 00:35:29:	balance. And say we're designing the street for all mode
00:35:29> 00:35:32:	of transportation or we should be saying that this is

00:35:32> 00:35:36:	about people. First, it's a people first approach. So during
00:35:36> 00:35:39:	our research we have also partner with European cities. So
00:35:39> 00:35:42:	for example from Sweden or from Finland very early on
00:35:43> 00:35:43:	they say that.
00:35:43> 00:35:47:	Well, we don't approach it this way where we show
00:35:47> 00:35:51:	them the picture of those intersection. They're like, well, this
00:35:51> 00:35:54:	is absolutely not acceptable in their world is if there
00:35:54> 00:35:58:	is accident. That's a design issue, so they're going to
00:35:58> 00:36:00:	go in very quickly, fix it and also is is
00:36:00> 00:36:04:	early on articulating it is people first period. So I
00:36:04> 00:36:07:	think those are the kind of culture shifts that we
00:36:07> 00:36:10:	are learning that it's a different, but I think there
00:36:10> 00:36:14:	is an opportunity. We would position the potential
	opportunity.
00:36:14> 00:36:18:	Most and also how this can. This would potentially slow
00:36:18> 00:36:23:	down development. I think that could potentially draw the attention.
00:36:23> 00:36:27:	This slide is important, So what this slide is showing
00:36:27> 00:36:31:	is that not withstanding the 46 billion, the \$62 billion
00:36:31> 00:36:35:	of rapid transit infrastructure is already funded. So which is,
00:36:35> 00:36:39:	you know, symbolically these red line, the area that has
00:36:39> 00:36:43:	the purple color they have. They have been losing people
00:36:43> 00:36:45:	within the urban areas.
00:36:45> 00:36:49:	In other words, the household size has decreased over the
00:36:49> 00:36:54:	last five years. Why? Because there is no social infrastructure.
00:36:54> 00:36:58:	There's also no hard infrastructure to support the growth like
00:36:58> 00:37:02:	in other words, if if the government is not taking
00:37:02> 00:37:06:	a comprehensive approach to integrate the timing of delivery of
00:37:06> 00:37:12:	transit infrastructure with servicing and soft infrastructure, these area would
00:37:12> 00:37:15:	not be able to accommodate meaningful growth.
00:37:16> 00:37:19:	So I think that is very important because if these
00:37:19> 00:37:23:	growth doesn't happen along the rapid transit lines, they would
00:37:23> 00:37:27:	happen somewhere else. That means our population. Many of our
00:37:27> 00:37:31:	population is still stuck with the driving culture, so as
00:37:31> 00:37:34:	part of our model, what we've been focusing on is
00:37:34> 00:37:38:	this year we'll be focusing on trying to prototype a
00:37:38> 00:37:43:	community so it's bundling walkable community with social infrastructure. So
00:37:43> 00:37:46:	what show on screen is an example of potentially?

00:37:46> 00:37:50:	What that can happen? Meaning on the ground level, it
00:37:50> 00:37:54:	has a comprehensive mix of different users from retail,
	culture,
00:37:54> 00:37:58:	arts, hospitality and community, and office uses all on the
00:37:58> 00:38:01:	ground floor but also at the same time. It very
00:38:01> 00:38:03:	important to have a nucleus in the middle.
00:38:04> 00:38:08:	So within Canada we have many different ministry and many
00:38:08> 00:38:12:	of the services is funded by many different ministries within
00:38:12> 00:38:15:	the province. So this is a model a trying to
00:38:15> 00:38:18:	have a one stop shop. In other words a drawing
00:38:18> 00:38:22:	all those funding sources into one place and using a
00:38:22> 00:38:26:	long term tenancy model so that the soft infrastructure can
00:38:26> 00:38:29:	be in place early on. So this is also part
00:38:29> 00:38:33:	of our learning in our collaboration with Helsinki, for example
00:38:33> 00:38:34:	looking at.
00:38:34> 00:38:38:	In their world by standard when they're building new community,
00:38:39> 00:38:42:	even when there is only 100 new residents, they would
00:38:42> 00:38:46:	build the schools and library facilities from day one and
00:38:46> 00:38:50:	to measure that everybody would have the opportunity for the
00:38:50> 00:38:53:	urban lifestyle from day one. So I think this is
00:38:53> 00:38:56:	a major shift, and part of that is that we
00:38:56> 00:39:00:	are also articulating a collaborative model which is plugging
	in
00:39:00> 00:39:04:	a lot of non planners so including public health, including
00:39:04> 00:39:04:	culture.
00:39:05> 00:39:09:	Including economic developments that usually they don't even have a
00:39:09> 00:39:12:	voice at the table, but they are critical in terms
00:39:12> 00:39:15:	of the city building, and I think what we see
00:39:15> 00:39:19:	is that in order to drive this culture shifts, we
00:39:19> 00:39:22:	need to give everybody an opportunity early on to think
00:39:22> 00:39:26:	big, not just on a small project scale, but really
00:39:26> 00:39:29:	thinking big. So this is a report that has released.
00:39:29> 00:39:32:	This is a summary of our first year effort is
00:39:32> 00:39:35:	a collaboration between UI Toronto District Council.
00:39:36> 00:39:40:	And also future of infrastructure group and what we have
00:39:40> 00:39:43:	done at that time is that we look at four
00:39:43> 00:39:48:	different cities and particularly thinking about what are the
	major
00:39:48> 00:39:53:	challenges and also what are the future opportunity. One of
00:39:53> 00:39:58:	the common things we repeatedly heard from the interviews that

00:39:58> 00:40:02:	we conducted with the participant is that the need to
00:40:02> 00:40:06:	align share vision from day one is extremely important.
00:40:06> 00:40:10:	Because that would trigger the decision making down the road.
00:40:10> 00:40:14:	So therefore for the second phase, what we're focusing on
00:40:14> 00:40:17:	is that we pick on the Community and try to
00:40:17> 00:40:20:	test how far we can push in terms of the
00:40:20> 00:40:23:	shared vision, but also at the same time using that
00:40:23> 00:40:27:	to demonstrate that the shift from an auto dependence culture
00:40:27> 00:40:30:	to transit oriented culture is possible and also the key
00:40:31> 00:40:34:	thing is about the value of public sector across the
00:40:34> 00:40:37:	whole entire city region. Everybody is very strange.
00:40:37> 00:40:41:	In terms of public resources and what we hope is
00:40:41> 00:40:44:	that we want to hopefully to use this to show
00:40:44> 00:40:48:	there's a different way of working, and if successful, this
00:40:48> 00:40:52:	should be a way that can accelerate delivering these type
00:40:52> 00:40:56:	of Community, not slowing it down and also at the
00:40:56> 00:40:59:	same time you know get to the some of the
00:40:59> 00:41:04:	really fundamental issues such as climate change, affordability and equity.
00:41:04> 00:41:07:	So that's the synergistic approach that.
00:41:07> 00:41:10:	We have talk so this washer on screen is the
00:41:10> 00:41:13:	case. Study for the phase two project and our goal
00:41:13> 00:41:16:	is to also to have a report completed this year
00:41:17> 00:41:19:	and to talk about you know some of the key
00:41:19> 00:41:23:	learnings and hopefully that could be a scalable model that
00:41:23> 00:41:27:	can apply to government and cities across city region regardless
00:41:27> 00:41:30:	of their scale. But it's really about a new way
00:41:30> 00:41:31:	of working.
00:41:31> 00:41:35:	That was really great really, really appreciate that Evan and
00:41:35> 00:41:37:	Paul correct me if I'm wrong, this is my first
00:41:37> 00:41:38:	go around.
00:41:38> 00:41:41:	Doing a virtual in this format, I've done plenty of
00:41:41> 00:41:44:	others. My understanding I'm going to kick it off of
00:41:44> 00:41:46:	the question or two, but we will lend it to
00:41:46> 00:41:49:	the audience and they will be able to go on
00:41:49> 00:41:52:	camera and ask in person. In addition to typing something
00:41:52> 00:41:53:	in the chat. Is that correct?
00:41:54> 00:41:57:	That's correct and I just allowed that ability. So if
00:41:57> 00:41:59:	you want to turn on your camera, please do so
00:41:59> 00:42:01:	or feel free to chat in the chat box to

00:42:01> 00:42:03:	do that as well so and and then if there
00:42:04> 00:42:06:	are, if you have ideas or thoughts of your own
00:42:06> 00:42:08:	community, please feel free to.
00:42:08> 00:42:09:	The reference those as well.
00:42:10> 00:42:13:	Excellent, awesome, so I'm gonna kick it off with somewhat
00:42:13> 00:42:16:	of a of a broad question here, you know, let's
00:42:16> 00:42:20:	talk about the definition of infrastructure. You know you go
00:42:20> 00:42:23:	back not that long ago. Infrastructure was the hard big
00:42:23> 00:42:26:	stuff that you built often to get from one place
00:42:26> 00:42:30:	to another. But we talk about social infrastructure. There's this
00:42:30> 00:42:34:	movement toward housing as infrastructure. As such a necessity to
00:42:34> 00:42:37:	just have a semi functioning society, not to even say
00:42:37> 00:42:38:	a flourishing.
00:42:38> 00:42:42:	Especially with the housing crisis we're facing on both sides
00:42:42> 00:42:44:	of the border of Canada and the US alike. So
00:42:44> 00:42:47:	I'd love to hear your thoughts Harriet and Evan in
00:42:47> 00:42:50:	terms of you know, what do you see as infrastructure
00:42:50> 00:42:53:	and is that definition broadening? And what are the implications
00:42:53> 00:42:57:	of our sort of more holistic view of what infrastructure
00:42:57> 00:42:59:	is? And we'll start with Harriet. And then we'll go
00:43:00> 00:43:00:	to Yvonne.
00:43:02> 00:43:06:	Well, we had some comments already in the chat, like
00:43:06> 00:43:10:	for example about broadband and what I find so interesting
00:43:10> 00:43:14:	is in different parts of the world. The agency that
00:43:14> 00:43:18:	does transportation is also the agency that does broadband. I
00:43:18> 00:43:22:	think Finland is one of those places and I think
00:43:22> 00:43:26:	that if nothing else the pandemic has really shown us
00:43:26> 00:43:29:	that a lot of our access is electronic. And whether
00:43:30> 00:43:31:	this telemedicine you know.
00:43:32> 00:43:35:	Telehealth tell a work that that is an important thing.
00:43:35> 00:43:39:	A really important component and some of the folks who
00:43:39> 00:43:43:	are doing mobility hubs are making the hub itself a
00:43:43> 00:43:47:	broadband hot spot so that people can get access. So
00:43:47> 00:43:51:	I think that I think the definition of infrastructure is
00:43:51> 00:43:54:	broadening. But I what I really wanted to say and
00:43:54> 00:43:57:	I think is a little bit at the heart of
00:43:57> 00:44:00:	what Yvonne was talking about, is that the what is
00:44:00> 00:44:02:	becoming a little less.
00:44:02> 00:44:06:	Important then that have every state and local government in
00:44:06> 00:44:10:	North America and probably the world has a six year

00:44:10> 00:44:14:	pipeline of capital projects and that and I say six
00:44:14> 00:44:18:	year pipeline. But some of the projects in that pipeline
00:44:18> 00:44:21:	are 10 years old, 20 years old. I guarantee you
00:44:22> 00:44:26:	most of them were conceived without any consideration of changing
00:44:26> 00:44:31:	climate and almost certainly without any consideration of equity, right?
00:44:31> 00:44:32:	So?
00:44:32> 00:44:35:	So the idea that we would in this moment ask
00:44:35> 00:44:38:	people to to give us our projects that help
00:44:38> 00:44:44:	decarbonize transportation, increase equity, make communities more resilient. But that's
00:44:44> 00:44:48:	just address that most people would put on whatever infrastructure
00:44:48> 00:44:52:	project they already had in the pipeline, and then hand
00:44:52> 00:44:55:	it back right to the government saying here it is.
00:44:55> 00:44:58:	I think what we're really looking for is a is
00:44:58> 00:45:01:	a set of approaches to infrastructure that start with.
00:45:02> 00:45:06:	Problems and communities that people want to solve and and
00:45:06> 00:45:10:	aspirations in communities that people you know that people have
00:45:10> 00:45:13:	and want to realize and then build up not just
00:45:13> 00:45:16:	a single project but a whole set of activities like
00:45:16> 00:45:19:	the kind of on describe that serve you know that
00:45:19> 00:45:23:	build the social capacity of communities that address people at
00:45:24> 00:45:27:	different times of their life and at different times of
00:45:27> 00:45:31:	day and that actually solve real problems that people have.
00:45:31> 00:45:33:	And it's more complicated.
00:45:33> 00:45:37:	It's more messy. It involves doing something that's almost unnatural
00:45:37> 00:45:41:	for government, which is to cooperate across. You know departments
00:45:41> 00:45:45:	and maybe across levels of government, but that's what the
00:45:45> 00:45:48:	times call for. And that's what that's what a lot
00:45:48> 00:45:51:	of us are trying to do. Paul and I are
00:45:51> 00:45:56:	part of something called the Community's First Infrastructure Alliance. More
00:45:56> 00:45:59:	than 60 organizations that have banded together to try to
00:45:59> 00:46:03:	help states, localities, MPO transit agencies, and.
00:46:03> 00:46:07:	Communities to come together to address problems and build projects
00:46:07> 00:46:11:	from the ground up that begin with, you know that

00:46:11> 00:46:15:	collaboration and that problem solving mentality and that probably engage
00:46:15> 00:46:19:	a lot of different types of infrastructure and a lot
00:46:19> 00:46:21:	of different types of agencies.
00:46:22> 00:46:25:	Appreciate it Ivonne curious as to your thoughts on this.
00:46:26> 00:46:28:	Yeah, so I have a few thoughts to add on
00:46:28> 00:46:32:	to that this is really about building an ecosystem so
00:46:32> 00:46:35:	infrastructure to me is an Ebola and in order to
00:46:35> 00:46:38:	make this work it cannot be just delivered by one
00:46:38> 00:46:42:	particular entity like. In other words, it has to involve
00:46:42> 00:46:46:	the public sector. It has to involve the local businesses
00:46:46> 00:46:48:	it has to use that as a way to create
00:46:48> 00:46:52:	the new economy. So for example the missing piece that
00:46:52> 00:46:55:	we're talking about, which is the common theme, is the
00:46:55> 00:46:56:	first and last mile.
00:46:57> 00:47:00:	Many of the residents they were very frank and say,
00:47:00> 00:47:03:	well, the reason why I feel I still need to
00:47:03> 00:47:05:	own a car is because I need to drive to
00:47:05> 00:47:08:	the train station. It's really as simple as that but
00:47:08> 00:47:12:	also at the same time there are entrepreneurs that is
00:47:12> 00:47:16:	providing escooter. For example, there's a company recently
	have the
00:47:16> 00:47:20:	partnership with our transit agencies and looking at piloting and
00:47:20> 00:47:23:	using the E scooter to do two things, it's not
00:47:23> 00:47:26:	just the first and last mile but it also have
00:47:26> 00:47:27:	a geofencing technology.
00:47:27> 00:47:31:	And using that to shed the light on attracting the
00:47:31> 00:47:34:	telecommunication coming in to do the 5G and also at
00:47:34> 00:47:38:	the same time using that to build the local capacity.
00:47:38> 00:47:41:	Because what we observe within the city region is because
00:47:41> 00:47:43:	we've been growing so quickly.
00:47:45> 00:47:50:	More change within neighborhood. People don't really get a chance
00:47:50> 00:47:53:	to know each other and I think now is the
00:47:53> 00:47:57:	time to use the digital infrastructure as Harriet was talking
00:47:58> 00:48:01:	about to really build that local capacity. So one of
00:48:01> 00:48:06:	the programs that our transit agency has established is called
00:48:06> 00:48:10:	the Community Benefits program and using that to work with
00:48:10> 00:48:15:	the local nonprofit organization. And right now the focus is
00:48:15> 00:48:16:	on creating.
00:48:16> 00:48:20:	Local jobs, but I think there's opportunity for that for
00:48:20> 00:48:24:	a version too, which is really based on. Broaden that.

00:48:24> 00:48:28:	The meaning of benefits like some of those is not
00:48:28> 00:48:32:	just creating local jobs, some of those is really about
00:48:32> 00:48:37:	demonstrating the tangible benefits it could be related to us
00:48:37> 00:48:40:	and culture, or it could be about public realm. It
00:48:41> 00:48:45:	could be any of the improvement that the developer want
00:48:45> 00:48:46:	to show to the local.
00:48:46> 00:48:50:	Community to avoid Nimbyism. I think. I think that's important
00:48:50> 00:48:54:	to show people that by doing this new development, adding
00:48:54> 00:48:58:	new density within this neighborhood is a way of benefiting
00:48:58> 00:49:02:	the new the existing neighborhood that is within walking distance.
00:49:02> 00:49:05:	I think I think that's a very important mechanism.
00:49:06> 00:49:09:	That's great, I'm gonna ask one more question now, and
00:49:09> 00:49:12:	I've got plenty in case there's a little dead time.
00:49:12> 00:49:15:	But as I mentioned in the chat, if anyone wants
00:49:15> 00:49:17:	to get in line, so to speak, there's an ability
00:49:17> 00:49:20:	to raise your hand in zoom. Or just put something
00:49:20> 00:49:23:	in chat and then we'll go ahead and order. But
00:49:23> 00:49:25:	I wanted to sort of follow up on what you
00:49:25> 00:49:28:	had, said Yvonne, and then we'll get to to Rowan
00:49:28> 00:49:31:	here. The first and last mile. You know we talked
00:49:31> 00:49:34:	so much, especially transit transportation in terms of the
00.40.24 > 00.40.20.	Center
00:49:34> 00:49:36:	City corps in Toronto and those near.
00:49:36> 00:49:40:	And suburbs, which are, you know, often dense urban cores
00:49:40> 00:49:43: 00:49:43> 00:49:46:	onto themselves in many ways. How do you and inherit
00:49:46> 00:49:48:	curious, you know, with you as a fellow Texan here
00:49:49> 00:49:52:	you know what are your thoughts in terms of how
00:49:52> 00:49:55:	we look at the suburbs, right? Yeah, that chicken and egg problem of the build the infrastructure? Or do you
00:49:55> 00:49:58:	build the land use? You know what comes first? How
00:49:58> 00:50:01:	do we look at that differently within a lower density,
00:50:01> 00:50:05:	more auto oriented environment where we're trying to create
00.00.01> 00.00.00.	these
00:50:05> 00:50:08:	mobility hubs or build upon opportunities to do so?
00:50:08> 00:50:10:	Either one of you if you want to jump in
00:50:10> 00:50:12:	just sort of curious as to your thoughts. How do
00:50:12> 00:50:15:	we treat the suburban areas? There's such a vast majority
00:50:15> 00:50:16:	of the land use that we see.
00:50:19> 00:50:20:	Evan, do you want to start?
00:50:21> 00:50:23:	Sure, yeah I can. I can start so one of
00:50:23> 00:50:26:	the common theme we heard. Again, this is from the
00:50:26> 00:50:30:	non planner. We start with public health. We start with

00:50:30> 00:50:33:	the school board and they say traffic problem is a
00:50:33> 00:50:36:	big problem. If you guys can find a solution to
00:50:36> 00:50:39:	that then can be scalable. So what they have tried
00:50:40> 00:50:42:	to do is a model called a walk to rock
00:50:42> 00:50:45:	and roll. It's a walk and roll program so it's
00:50:45> 00:50:48:	a walking to school program cycling to school.
00:50:48> 00:50:51:	Program, but in order for that to work, your child
00:50:51> 00:50:55:	friendly walking and cycling infrastructure has to be in place
00:50:56> 00:50:59:	early on from a network perspective, and I think that
00:50:59> 00:51:04:	need tremendous leadership. Funding is not significant, but it's really
00:51:04> 00:51:08:	about tremendous leadership to get that in. So going back
00:51:08> 00:51:10:	to the chicken and an egg, I see the next
00:51:10> 00:51:15:	generation of booking infrastructure. Is that similar to you? Won't
00:51:15> 00:51:18:	be able to do any development until you have water.
00:51:18> 00:51:22:	And waste water. You won't be able to, you know,
00:51:22> 00:51:26:	grow a community, or improve existing community. If you don't
00:51:26> 00:51:32:	have this active mobility infrastructure, it's important as that, yeah.
00:51:32> 00:51:33:	So.
00:51:33> 00:51:35:	That's great, go ahead area.
00:51:33> 00:51:35: 00:51:35> 00:51:38:	That's great, go ahead area. We're, you know we're still in the pandemic and and
00:51:35> 00:51:38:	We're, you know we're still in the pandemic and and
00:51:35> 00:51:38: 00:51:39> 00:51:42: 00:51:42> 00:51:45: 00:51:45> 00:51:49:	We're, you know we're still in the pandemic and and it's not clear what you know what and how many people are going to be returning to work, but it has made it. You know, even more clear how nice
00:51:35> 00:51:38: 00:51:39> 00:51:42: 00:51:42> 00:51:45: 00:51:45> 00:51:49: 00:51:49> 00:51:52:	We're, you know we're still in the pandemic and and it's not clear what you know what and how many people are going to be returning to work, but it has made it. You know, even more clear how nice it is. You know now that we have enough, you
00:51:35> 00:51:38: 00:51:39> 00:51:42: 00:51:42> 00:51:45: 00:51:45> 00:51:49: 00:51:49> 00:51:52: 00:51:52> 00:51:56:	We're, you know we're still in the pandemic and and it's not clear what you know what and how many people are going to be returning to work, but it has made it. You know, even more clear how nice it is. You know now that we have enough, you know an office buildings worth of workers in every residential
00:51:35> 00:51:38: 00:51:39> 00:51:42: 00:51:42> 00:51:45: 00:51:45> 00:51:49: 00:51:49> 00:51:52: 00:51:52> 00:51:56: 00:51:56> 00:52:00:	We're, you know we're still in the pandemic and and it's not clear what you know what and how many people are going to be returning to work, but it has made it. You know, even more clear how nice it is. You know now that we have enough, you know an office buildings worth of workers in every residential neighborhood. How nice it is to be able to walk
00:51:35> 00:51:38: 00:51:39> 00:51:42: 00:51:42> 00:51:45: 00:51:45> 00:51:49: 00:51:49> 00:51:52: 00:51:52> 00:51:56: 00:51:56> 00:52:00: 00:52:00> 00:52:02:	We're, you know we're still in the pandemic and and it's not clear what you know what and how many people are going to be returning to work, but it has made it. You know, even more clear how nice it is. You know now that we have enough, you know an office buildings worth of workers in every residential neighborhood. How nice it is to be able to walk to get a cup of coffee, right walk?
00:51:35> 00:51:38: 00:51:39> 00:51:42: 00:51:42> 00:51:45: 00:51:45> 00:51:49: 00:51:49> 00:51:52: 00:51:52> 00:51:56: 00:51:56> 00:52:00: 00:52:00> 00:52:02: 00:52:03> 00:52:05:	We're, you know we're still in the pandemic and and it's not clear what you know what and how many people are going to be returning to work, but it has made it. You know, even more clear how nice it is. You know now that we have enough, you know an office buildings worth of workers in every residential neighborhood. How nice it is to be able to walk to get a cup of coffee, right walk?  To get a gallon of milk, you know have some
00:51:35> 00:51:38: 00:51:39> 00:51:42: 00:51:42> 00:51:45: 00:51:45> 00:51:49: 00:51:49> 00:51:52: 00:51:52> 00:51:56: 00:51:56> 00:52:00: 00:52:00> 00:52:02: 00:52:03> 00:52:05: 00:52:05> 00:52:09:	We're, you know we're still in the pandemic and and it's not clear what you know what and how many people are going to be returning to work, but it has made it. You know, even more clear how nice it is. You know now that we have enough, you know an office buildings worth of workers in every residential neighborhood. How nice it is to be able to walk to get a cup of coffee, right walk?  To get a gallon of milk, you know have some of that convenience and walking distance. So I think that
00:51:35> 00:51:38: 00:51:39> 00:51:42: 00:51:42> 00:51:45: 00:51:45> 00:51:49: 00:51:49> 00:51:52: 00:51:52> 00:51:56: 00:51:56> 00:52:00: 00:52:00> 00:52:05: 00:52:03> 00:52:05: 00:52:09> 00:52:13:	We're, you know we're still in the pandemic and and it's not clear what you know what and how many people are going to be returning to work, but it has made it. You know, even more clear how nice it is. You know now that we have enough, you know an office buildings worth of workers in every residential neighborhood. How nice it is to be able to walk to get a cup of coffee, right walk?  To get a gallon of milk, you know have some of that convenience and walking distance. So I think that there's you know, maybe more opportunity for a little bit
00:51:35> 00:51:38: 00:51:39> 00:51:42: 00:51:42> 00:51:45: 00:51:45> 00:51:49: 00:51:49> 00:51:52: 00:51:52> 00:51:56: 00:51:56> 00:52:00: 00:52:00> 00:52:02: 00:52:03> 00:52:05: 00:52:05> 00:52:13: 00:52:13> 00:52:16:	We're, you know we're still in the pandemic and and it's not clear what you know what and how many people are going to be returning to work, but it has made it. You know, even more clear how nice it is. You know now that we have enough, you know an office buildings worth of workers in every residential neighborhood. How nice it is to be able to walk to get a cup of coffee, right walk?  To get a gallon of milk, you know have some of that convenience and walking distance. So I think that there's you know, maybe more opportunity for a little bit of urbanization of the suburbs and for and for many
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	recession, people dialed
00:52:41> 00:52:46:	down their transportation costs because they could, and
	these options
00:52:46> 00:52:50:	were available and and there was very little bankruptcy or
00:52:50> 00:52:54:	foreclosure and property values dipped, but they didn't
	comment and
00:52:54> 00:52:58:	that in the same jobs and heart housing market that
00:52:58> 00:53:01:	our region is, that was really an anomaly. The outer
00:53:01> 00:53:03:	of the middle and the outer.
00:53:03> 00:53:08:	Ring Suburbs had relative catastrophes, and so they started looking
00:53:09> 00:53:13:	at adding transit and building in a transit oriented pattern
00:53:13> 00:53:18:	even in places where they didn't yet have the transit
00:53:18> 00:53:22:	in order to serve future transit. So I think you
00:53:22> 00:53:26:	know, I think the idea of some walkable convenience is
00:53:26> 00:53:31:	that is increasingly appealing in the suburbs, and because poverty
00:53:31> 00:53:33:	has also suburbanized.
00:53:33> 00:53:36:	You know some of the other issues around the need
00:53:36> 00:53:41:	for transportation options. The need to actually provide affordable housing.
00:53:41> 00:53:45:	Those are also practices that suburbs were able to pretty
00:53:45> 00:53:48:	much avoid. You know two decades ago, but now are
00:53:48> 00:53:51:	really having to grapple with, so I think there's a
00:53:52> 00:53:55:	lot more in common. The urban and and the suburban
00:53:55> 00:53:55:	these days.
00:53:57> 00:54:01:	A couple of points to what Harry was talking about.
00:54:01> 00:54:05:	The suburban contest definitely is transforming what we see within
00:54:05> 00:54:09:	the Greater Toronto area. Housing affordability is a big issue,
00:54:09> 00:54:13:	but also the aging population. People do not want to
00:54:13> 00:54:16:	age in place, they want to age in neighborhood. So
00:54:16> 00:54:20:	that means even the single detached Wellings is very common
00:54:21> 00:54:25:	and many cities is now going through their statutory planning
00:54:25> 00:54:27:	approvals to make that into as of right.
00:54:28> 00:54:32:	So meaning to have multiple household living within one single
00:54:32> 00:54:36:	detached housing, so I think that's becoming very common, so
00:54:36> 00:54:40:	if that is gone going on moving forward a couple
00:54:40> 00:54:43:	with people is working in a hybrid model. So that
00:54:43> 00:54:48:	means these are walking and cycling infrastructure like even in

00:54:48> 00:54:52:	the suburban area that is going through the transformation is
00:54:52> 00:54:56:	absolutely important. So that means I think all the cities
00:54:56> 00:54:57:	should go back.
00:54:58> 00:55:01:	Work with their public health and looking at what are
00:55:01> 00:55:04:	the streets that you don't have a sidewalk? Or maybe
00:55:04> 00:55:07:	only have sidewalk on one side? What are the street
00:55:07> 00:55:10:	that you don't have the connectivity to schools and very
00:55:10> 00:55:12:	quickly doing the retrofit? Yeah.
00:55:13> 00:55:16:	Excellent Rowan, appreciate your patience.
00:55:17> 00:55:19:	No, that's OK when you have two fine speakers like
00:55:19> 00:55:22:	this, you have a lot to say. It's always good
00:55:22> 00:55:25:	to listen. So thanks and hello to everyone. I just
00:55:25> 00:55:27:	wanted to go back to your original question about the
00:55:28> 00:55:29:	definition of infrastructure.
00:55:31> 00:55:33:	So I think one of the things I would think
00:55:33> 00:55:38:	is is infrastructure is absolutely dynamic, right? And it changes
00:55:38> 00:55:41:	and it has been changing. And actually we're very fortunate
00:55:41> 00:55:44:	in that we have in our lifetime seen a whole
00:55:44> 00:55:45:	new category of.
00:55:45> 00:55:46:	Infrastructure created.
00:55:47> 00:55:50:	So the definition that I tend to work with is
00:55:50> 00:55:53:	infrastructure. Are the systems that are needed to allow us
00:55:53> 00:55:56:	to exist in the environments in which we choose to
00:55:56> 00:56:00:	live, and there are basically 3 environments that we experience.
00:56:00> 00:56:03:	We experience the built environment, so that's the houses we
00:56:03> 00:56:06:	live in, the roads we drive on, the offices, we
00:56:06> 00:56:09:	go to the shopping center as the schools, everything. There's
00:56:09> 00:56:12:	also the natural environment which is the parks and the
00:56:13> 00:56:16:	wilderness and the farmland and all that sort of stuff.
00:56:16> 00:56:18:	And then we've created a third one.
00:56:18> 00:56:21:	In our lifetimes, which is the digital environment right which
00:56:21> 00:56:22:	is not actually?
00:56:22> 00:56:23:	Physically present anymore.
00:56:26> 00:56:29:	So you know the things that we're hearing and we're
00:56:29> 00:56:32:	talking about today and really, TOTD, you know what we're
00:56:33> 00:56:37:	actually talking about. Here is the overlap between those environments,
00:56:37> 00:56:41:	right? What we're actually hearing about is, you know what
00:56:41> 00:56:45:	we're actually talking about is how people develop those
	systems.

00:56:46> 00:56:50:	To actually live their lives through those different environments, how
00:56:50> 00:56:53:	do we get broadband to people's homes so that they
00:56:53> 00:56:57:	can work from home? How do we create transit systems
00:56:57> 00:57:01:	that people can move efficiently between places? And we're always
00:57:01> 00:57:05:	looking to optimize this, right? We're maximum output for lease
00:57:05> 00:57:08:	cost input, so I mean, that's just sort of my
00:57:08> 00:57:11:	perspective on it, and certainly I would agree with Avon.
00:57:11> 00:57:14:	I'm also in Toronto and so that shift from sort
00:57:14> 00:57:16:	of suburban to urban.
00:57:16> 00:57:19:	Is it's a difficult one? It's one that we we
00:57:19> 00:57:22:	made a choice in North America well over 50 years
00:57:22> 00:57:25:	ago that we were going to be car centered. Sort
00:57:25> 00:57:29:	of cities. That's you know one of the greatest infrastructure
00:57:29> 00:57:33:	investments of all time was the US Interstate roadway system.
00:57:33> 00:57:36:	You know, it's a marvel when you look at it
00:57:36> 00:57:39:	in terms of what it was built and how quickly
00:57:39> 00:57:41:	it was built. But it also meant that we tied
00:57:41> 00:57:43:	our future to the car.
00:57:44> 00:57:47:	Unwinding that now and transforming our cities and our neighborhoods,
00:57:47> 00:57:50:	and even our way of approaching life is is a
00:57:50> 00:57:53:	difficult and and transformative one for a lot of communities.
00:57:54> 00:57:56:	And they're all going about it in different ways.
00:57:58> 00:58:01:	Really appreciate that Rowan, thank you and and as folks
00:58:01> 00:58:03:	are called on and I'll get to you Fabiola, in
00:58:03> 00:58:06:	a second if you could introduce yourself just you know
00:58:07> 00:58:10:	5 seconds right where you're from and filiation just so
00:58:10> 00:58:13:	we have a little context that would be tremendous. And
00:58:13> 00:58:14:	Fabiola you are up.
00:58:16> 00:58:16:	Hi.
00:58:18> 00:58:21:	We lower my hand so my name is Cheryl Arkinson.
00:58:21> 00:58:25:	I actually work for you a lot. I don't miss
00:58:25> 00:58:28:	this events that pull organizes because I think I'm a
00:58:29> 00:58:33:	systemic thinker and I think infrastructure is one of the
00:58:33> 00:58:37:	best examples of how systems are nested. My question is
00:58:37> 00:58:41:	a little more specific, so I live in Montgomery County.
00:58:41> 00:58:45:	
	I'm part of the Committee for Pedestrian and Bike and
00:58:45> 00:58:48:	I'm part of the Committee for Pedestrian and Bike and Transit Safety and what's really interesting.

00:58:51> 00:58:54:	plants and a lot of really big thinking about how
00:58:54> 00:58:56:	to do this, but I always go back to the
00:58:56> 00:58:59:	simple question. My kids cannot ride a bike to get
00:58:59> 00:59:02:	to school, so if we don't have the way for
00:59:02> 00:59:05:	a cultural shift of what it is that all this
00:59:05> 00:59:08:	micro mobility can allow for us to connect and get,
00:59:08> 00:59:11:	you know, live without a car, our experiences start as
00:59:12> 00:59:15:	a culture, so some of your great examples have to
00:59:15> 00:59:18:	do with the Netherlands, and I've spent some time in
00:59:18> 00:59:19:	the Netherlands.
00:59:19> 00:59:22:	And for me, it's really interesting is it's part of
00:59:22> 00:59:25:	their culture, right? It is some. It is their first
00:59:25> 00:59:28:	choice. So in the United States you know. Yes, as
00:59:28> 00:59:31:	as Ron mentioned, you know we are car centric or
00:59:31> 00:59:34:	mostly in most continent and I should be saying that
00:59:34> 00:59:37:	I'm from Mexico, so that is a different kind of
00:59:37> 00:59:40:	perspective. But I also could not bike to school. So
00:59:40> 00:59:42:	my question is, is there data or is there any
00:59:42> 00:59:46:	of the approaches that you're you're seeing in your organizations
00:59:46> 00:59:49:	and in your cities about how do you connect?
00:59:49> 00:59:52:	How do you do that cultural shift? And if do
00:59:52> 00:59:55:	we know how many schools around you know the United
00:59:55> 00:59:58:	States, or in Canada the percentage of kids that can
00:59:58> 01:00:01:	actually walk or bike to school? And of course, I
01:00:01> 01:00:05:	understand that there's an equity implication here to my question,
01:00:05> 01:00:08:	but but I'm just curious because I think a lot
01:00:08> 01:00:11:	of it is. Yes, you can create that experience. You
01:00:11> 01:00:15:	can create those places and people will experience it, but
01:00:15> 01:00:18:	people do not demand it or the market will not
01:00:18> 01:00:19:	necessarily go there.
01:00:19> 01:00:23:	If you don't have early on experiences, it is to
01:00:23> 01:00:26:	use micro mobility. Your body or scooter.
01:00:28> 01:00:31:	Harriet or Ivan to do either of you know of
01:00:31> 01:00:33:	any such data that might be out out there or
01:00:33> 01:00:33:	polling.
01:00:34> 01:00:37:	Can share the Canadian data so through our research we
01:00:38> 01:00:41:	started shed light that free over 4 so it's actually
01:00:41> 01:00:44:	75 percent. 75% of the kids. They do not walk
01:00:44> 01:00:47:	or bike to school. That's the problem. So we use
01:00:47> 01:00:49:	that to say we need to make the shift in
01:00:49> 01:00:53:	planning. So right now our school board planning their district

01:00:53> 01:00:57:	boundary is different than the walkable neighborhood.
01:00:58> 01:01:02:	So that's the one disconnect. Another disconnect is culture
	and
01:01:02> 01:01:06:	you're absolutely right. We need to find opportunity to teach
01:01:06> 01:01:09:	the kids how to ride a bike from day one.
01:01:09> 01:01:11:	So meaning having the open St.
01:01:12> 01:01:16:	Those are events during the weekend. Looking at how other
01:01:16> 01:01:20:	cities, for example in Japan is very common, that they
01:01:20> 01:01:24:	would actually have this program intentionally teaching kids early on
01:01:24> 01:01:27:	how to ride a bike just like adults would need
01:01:27> 01:01:31:	to go through the courses to get a driving license.
01:01:32> 01:01:35:	What we see emerging within the GTA is the shift
01:01:35> 01:01:38:	of economy. So the tech company they come with the
01:01:39> 01:01:43:	requirement that they want to have high quality outdoor amenity
01:01:43> 01:01:48:	including trails including sports facilities and they are picking on
01:01:48> 01:01:51:	cities that is able to have the talent pool. But
01:01:51> 01:01:55:	in other words they are looking for cities that has
01:01:55> 01:02:00:	contributed and showing the leadership to having these high quality
01:02:00> 01:02:01:	walking and cycling.
01:02:01> 01:02:06:	And trail impulse infrastructure from day one. So I think
01:02:06> 01:02:10:	it's a combination of those three factors. But you're right,
01:02:10> 01:02:13:	the data at the moment is alarming.
01:02:13> 01:02:17:	And I think if we have not learning from from
01:02:17> 01:02:20:	COVID, it would be very unfortunate and we hope that
01:02:21> 01:02:24:	other than you know, working from home this will be
01:02:24> 01:02:28:	another key matters that would need to build that momentum
01:02:28> 01:02:30:	to make that shift.
01:02:33> 01:02:35:	You know we're in the same region.
01:02:37> 01:02:37:	See how I?
01:02:39> 01:02:40:	Fabiola
01:02:41> 01:02:44:	and you know, you probably know this about DC. Second
01:02:44> 01:02:48:	graders have a bicycle course, right? So they are taught
01:02:48> 01:02:51:	how to ride bikes and about bike safety, and about
01:02:51> 01:02:54:	the kinds of trips that they can take. And they
01:02:54> 01:02:57:	routinely testify in the district for the Council about, you
01:02:57> 01:03:00:	know how important it is to have bike safety, but
01:03:00> 01:03:04:	you mentioned the Netherlands on and I always take a
01:03:04> 01:03:06:	lot of comfort in knowing that you know.
01:03:06> 01:03:07:	The.

01:03:07> 01:03:10:	The Dutch were not always the cycling maniacs that they
01:03:10> 01:03:11:	are now.
01:03:11> 01:03:14:	You know that really it was in the 1970s that
01:03:14> 01:03:18:	they kind of turned away from automobility and in reaction
01:03:18> 01:03:21:	to how much cars had taken over the streets and
01:03:21> 01:03:25:	the you know, and and and pollution and crowding
01:03:25> 01:03:28:	and parking on sidewalks and things like that. So I
01:03:29> 01:03:30:	would just say that.
01:03:32> 01:03:33:	It it.
01:03:33> 01:03:36:	You know the other. The other side of this is
01:03:36> 01:03:39:	that a lot of us on the call, you know,
01:03:39> 01:03:42:	walk to school. When we were kids, right? And so
01:03:42> 01:03:44:	what's changed is not just.
01:03:45> 01:03:48:	You know that maybe there are a lot more heavy
01:03:48> 01:03:51:	SUV's, but how people parent this part of what's changed,
01:03:51> 01:03:55:	right? That it's that what we would now consider. We
01:03:55> 01:03:58:	consider it parental neglect. Was Muhammad of us grew up
01:03:58> 01:04:01:	like you know your parent. You saw your parents when
01:04:01> 01:04:04:	you left in the morning, and especially in the summer
01:04:04> 01:04:08:	you didn't come back until sunset, right? And and and
01:04:08> 01:04:10:	you know, we were kind of on your.
01:04:10> 01:04:10:	Own and that.
01:04:10> 01:04:13:	Would that would just doesn't happen today, so it's it's
01:04:13> 01:04:15:	a lot of factors which doesn't help answer your question.
01:04:16> 01:04:20:	But you know, land use convenient make making short trips
01:04:20> 01:04:24:	convenient and and talking about equity. Almost 40% of the
01:04:24> 01:04:28:	households in our city don't have access to cars, so
01:04:28> 01:04:31:	we're constantly saying how is it fair that all the
01:04:31> 01:04:34:	public right of way goes to cars? We need protected
01:04:35> 01:04:38:	bike lanes. We need protective pedestrian ways we need. We
01:04:38> 01:04:43:	don't just need lower speed limits because they're not effective.
01:04:43> 01:04:46:	We need infrastructure that sends the signal.
01:04:46> 01:04:49:	To to drive slowly so it's a it's a process,
01:04:49> 01:04:52:	but I think that you know your advocacy is really
01:04:52> 01:04:55:	appreciated and we all need to be advocates you know
01:04:55> 01:04:58:	for for these changes in our communities.
01:04:59> 01:05:01:	Yeah, and and that actually I'm gonna ohh go
01:05:01> 01:05:02:	ahead Fabiola.
01:05:02> 01:05:04:	No, it's just gonna say I think your your point.
01:05:04> 01:05:07:	Harriet about parenting is really, really important. It is a
01:05:08> 01:05:10:	cultural thing. I think other countries in the world don't

01:05:11> 01:05:13:	feel that the streets or the city is always a
01:05:13> 01:05:16:	dangerous place. And there's statistics that support that that
	we
01:05:16> 01:05:19:	are not living in a much more dangerous time. You
01:05:19> 01:05:22:	know, notwithstanding what's happening with gun control in the United
01:05:22> 01:05:25:	States but just you walking out to your neighborhood park,
01:05:26> 01:05:28:	there's just really not the statistics to support the fact
01:05:29> 01:05:30:	that we can't do that.
01:05:30> 01:05:34:	So the experience that most kids have of infrastructure has
01:05:34> 01:05:37:	really been kind of mediated by that way of parenting
01:05:37> 01:05:37:	SO.
01:05:38> 01:05:40:	And I'd also like to buy, you know, Harry. You
01:05:40> 01:05:43:	had mentioned that the need for the provision of the
01:05:43> 01:05:46:	infrastructure itself, not to mention the signaling and all. And
01:05:46> 01:05:49:	Fabiola you had mentioned the Netherlands, and I think this
01:05:49> 01:05:51:	is a very good time to remind people that Amsterdam
01:05:51> 01:05:54:	wasn't always Amsterdam. And what do I mean by that
01:05:54> 01:05:57:	right? There's this great picture. Many of you might have
01:05:57> 01:05:59:	seen it where you know there was a period where
01:05:59> 01:06:01:	Amsterdam had been auto centric.
01:06:01> 01:06:05:	And there's this public square or whatnot, and it's basically
01:06:05> 01:06:07:	a parking lot and it looks anything but what you
01:06:07> 01:06:11:	imagine as this pedestrian bicycling Wonderland that it is today.
01:06:11> 01:06:13:	And that's a reminder of two things. One, we have
01:06:13> 01:06:17:	to make intentional decisions. You know, they made an intentional
01:06:17> 01:06:20:	decision to steer away from that which has brought them
01:06:20> 01:06:22:	to a different present now. But it was a different
01:06:23> 01:06:26:	future when they made that decision, and secondly reminds me
01:06:26> 01:06:29:	of the self fulfilling prophecies we create. You know, I'm
01:06:29> 01:06:31:	in Dallas, no one walks in Dallas. No one's ever
01:06:31> 01:06:32:	going to bike.
01:06:32> 01:06:35:	And part of the reason why is in many ways
01:06:35> 01:06:38:	we make it almost aggressively impossible to do so, so
01:06:38> 01:06:41:	it's that self fulfilling prophecy of if you don't create
01:06:41> 01:06:44:	the infrastructure or the options. Of course, no one's going
01:06:44> 01:06:47:	to use it, and then it's very easy to come
01:06:47> 01:06:49:	back and say well no one bites or no one
01:06:49> 01:06:52:	walks and we have to make these intentional decisions and
01:06:52> 01:06:55:	it relates as we have discussed before, to breaking down

01:06:55> 01:06:58:	those silos of land use of housing policy, and certainly
01:06:59> 01:07:03:	both transportation and infrastructure funding and how we
	actually build
01:07:03> 01:07:03:	that.
01:07:03> 01:07:06:	And you would also mention we've heard it a couple
01:07:06> 01:07:09:	times. COVID, I think we'd be remiss to not discuss,
01:07:09> 01:07:12:	you know, how has this changed our perception of how
01:07:12> 01:07:16:	and what you know. Infrastructure and transportation is, whether it's
01:07:16> 01:07:19:	commuting patterns, whether it's a more diffuse path or not,
01:07:19> 01:07:22:	everyone going from you know your suburban lawns. You know
01:07:22> 01:07:26:	I came from Long Island. Everyone went in One Direction
01:07:26> 01:07:29:	in the morning, One Direction in the evening. That's a
01:07:29> 01:07:32:	bit different in some of the, you know, megalopolises, such
01:07:32> 01:07:33:	as the DFW region.
01:07:33> 01:07:37:	Because we have many polls, so it's not just everyone
01:07:37> 01:07:40:	going to a downtown and back, but curious Yvonne and
01:07:40> 01:07:43:	Harriet. And some folks in the audience. How do you
01:07:43> 01:07:47:	seal this post? COVID hybrid centric world affecting, you know
01:07:47> 01:07:51:	transit because the trips might not be as simple to
01:07:51> 01:07:54:	quantify and maybe it even provides more importance to that
01:07:54> 01:07:59:	first and last mile because those micro mobility options instead
01:07:59> 01:08:01:	of being used to get to work and back might
01:08:01> 01:08:03:	be what you used on a Monday.
01:08:03> 01:08:06:	Tuesday, Thursday when you don't have to go into the
01:08:06> 01:08:09:	office so that you can cut down those local trips.
01:08:09> 01:08:11:	What does this post COVID world look for us and
01:08:11> 01:08:14:	I'm curious for some audience thoughts on that too.
01:08:14> 01:08:17:	Yeah, so I have three thoughts to share. I just
01:08:17> 01:08:18:	want to go back to what?
01:08:20> 01:08:24:	Our last conversation. All the cities that are struggling in
01:08:24> 01:08:28:	terms of public health dollars. So we know that by
01:08:28> 01:08:33:	enabling an active living style that could dramatically reduce healthcare
01:08:33> 01:08:37:	spending, I think that's huge and really early on. You
01:08:37> 01:08:41:	know, putting that from a number of perspective, secondly is
01:08:42> 01:08:45:	safety. So there are many meetings with a lot of
01:08:45> 01:08:49:	engineers in the room. Nobody's able to make a decision
01:08:49> 01:08:50:	about lane reduction.
01:08:51> 01:08:54:	But if somebody asks a question if there is a

01:08:54> 01:08:58:	danger on the road, do you remove the child or
01:08:58> 01:08:59:	you remove the car?
01:09:00> 01:09:04:	That is a very powerful way of looking at problem
01:09:04> 01:09:09:	solving very differently, and I think this is about time.
01:09:09> 01:09:14:	Particularly we are coming out of COVID with these major
01:09:14> 01:09:18:	shift is to ask these type of questions. So going
01:09:18> 01:09:22:	back to modeling so instead of looking at how many
01:09:22> 01:09:26:	hours or how how much congestion will we expect in
01:09:26> 01:09:30:	this area. But it's really thinking about.
01:09:30> 01:09:34:	The peak hour very differently. So instead of trying to
01:09:34> 01:09:38:	design the infrastructure that you don't have congestion during your
01:09:38> 01:09:42:	peak hour, but it's the peak period and really expanding
01:09:42> 01:09:45:	that peak period, because once we do that, I think
01:09:45> 01:09:48:	I my suspicion is more than half of the existing
01:09:48> 01:09:52:	other infrastructure we we're going to find those redundant, and
01:09:52> 01:09:55:	if we don't retrofit those, those are costing all the
01:09:55> 01:10:00:	cities and region within Northern America. Billions and billions of
01:10:00> 01:10:00:	dollars.
01:10:02> 01:10:05:	I think one of the things that we're saying in
01:10:05> 01:10:08:	so many places is that that concentration of office only
01:10:08> 01:10:12:	uses or. Let's be honest, office and cultural and government
01:10:12> 01:10:16:	uses in the downtown, you know, is really left them
01:10:16> 01:10:20:	vulnerable. The east and West parts of our downtown developed
01:10:20> 01:10:23:	later, and they're mixed. They have a lot of housing.
01:10:23> 01:10:27:	They have a lot of different kinds of offices and
01:10:27> 01:10:30:	a lot of flexibility because of the building type to
01:10:30> 01:10:32:	switch in between, so I think.
01:10:32> 01:10:35:	Uh, that is the that's one of the issues. UM,
01:10:35> 01:10:39:	we you know, we really love our cultural institutions, many
01:10:39> 01:10:42:	of which are centered in our downtown and they need
01:10:42> 01:10:46:	support. You know, the restaurants and the other, the other
01:10:46> 01:10:50:	great destinations need support, but we also need more mixed
01:10:50> 01:10:53:	uses, and I think a lot of downtowns are having
01:10:53> 01:10:57:	this conversation with their cities. Now, depending on the what
01:10:57> 01:11:00:	the office rents are, the feasibility of of taking the
01:11:00> 01:11:03:	hit to the construction to making
01:11:03> 01:11:06:	hit to do a conversion to residential.

01:11:06> 01:11:10:	some buildings are completely impractical for that conversion and others
01:11:10> 01:11:11:	are like not so bad.
01:11:12> 01:11:15:	No, I think that's greater than and you know, I'll
01:11:15> 01:11:17:	do a comment. And if anyone else I'd love to
01:11:17> 01:11:20:	hear from thoughts from some folks in the audience of
01:11:20> 01:11:22:	what you are seeing and your cities, your markets through
01:11:22> 01:11:25:	your work or just life experience, you know from from
01:11:25> 01:11:27:	that perspective, to sort of to sort of get that
01:11:27> 01:11:30:	broader perspective. So please do do. Feel free to sort
01:11:30> 01:11:32:	of chime in. One thing I can say, and it
01:11:32> 01:11:34:	goes back to choices. You know where it's not only
01:11:34> 01:11:37:	COVID, we're seeing you know. Certainly here in the states,
01:11:37> 01:11:40:	you know gas prices that we've just never seen because
01:11:40> 01:11:43:	it's always been such a relatively low barrier here as
01:11:43> 01:11:43:	compared to.
01:11:43> 01:11:46:	Prices you know in other markets around the world you
01:11:46> 01:11:49:	know, and you're now seeing people that are forced to
01:11:49> 01:11:52:	make a decision. You know they're saying, well, it's good.
01:11:52> 01:11:54:	It's costing me X dollars every day to get to
01:11:54> 01:11:57:	or from work and beyond the ability to go hybrid.
01:11:57> 01:12:00:	It's forcing people to look at some of these other
01:12:00> 01:12:03:	options and and it reminds me I've been either consulting
01:12:03> 01:12:06:	or developing sort of walkable communities. You know, going on
01:12:06> 01:12:09:	20 years? Well, until about 6-7 years ago I had
01:12:09> 01:12:12:	lived on Long Island where we invented the suburb for
01:12:12> 01:12:13:	better and certainly for worse.
01:12:13> 01:12:16:	And I couldn't walk other than two stores, so I
01:12:16> 01:12:19:	was not walking the walk. I moved here to Dallas
01:12:19> 01:12:22:	and I specifically chose a location where I could live
01:12:22> 01:12:25:	car free and did so for almost two years. But
01:12:25> 01:12:28:	a lot of intention went into that. I I specifically
01:12:28> 01:12:31:	chose an apartment that was across the street from the
01:12:31> 01:12:34:	trolley, which happened to be my commute to work. I
01:12:34> 01:12:37:	would walk often, but on your hot days or your
01:12:37> 01:12:40:	rainy days, that would be my option and it forced
01:12:40> 01:12:42:	me to think in the terms of the types of
01:12:42> 01:12:43:	places I was building.
01:12:43> 01:12:46:	Because if I lived literally two blocks of these are
01:12:46> 01:12:49:	big blocks here, they're not, you know, New York short
01:12:49> 01:12:51:	blocks, you know, two blocks further on, a 98 are

01:12:51> 01:12:54:	certainly 160 degree day as we might hit this week,
01:12:54> 01:12:56:	I don't think I make that three blocks. I say,
01:12:56> 01:12:59:	you know what? I'm just going to find it. I'm
01:12:59> 01:13:01:	just going to drive. I'm going to get lifting an
01:13:01> 01:13:04:	Uber so it really is about these inflection points and
01:13:04> 01:13:08:	having those choices available. But then making those choices attractive
01:13:08> 01:13:10:	for folks. So I think that's something that's very, very
01:13:10> 01:13:11:	important.
01:13:12> 01:13:14:	So I don't see anything from the audience right now.
01:13:15> 01:13:17:	Do you want you all to jump in? But how
01:13:17> 01:13:19:	about something else we see in the future, which is
01:13:19> 01:13:22:	going to change a lot, but not as quickly as
01:13:22> 01:13:25:	people I think had imagined five years ago, and that's
01:13:25> 01:13:28:	the autonomous vehicle revolution, right? I mean, you know you
01:13:28> 01:13:31:	have folks that are saying this is going to change
01:13:31> 01:13:33:	everything. I'm not going to at least start off by
01:13:33> 01:13:36:	taking a side, but whether it's Elon's tunnels and we
01:13:36> 01:13:39:	know that there are thoughts on that front or other
01:13:39> 01:13:42:	means of ATV vehicles, curious as to your thoughts.
01:13:42> 01:13:44:	I will start with you Harriet and go to you,
01:13:44> 01:13:47:	Yvonne and again folks in the audience. How do you
01:13:47> 01:13:50:	see the autonomous vehicle revolution changing for the better or
01:13:50> 01:13:54:	for worse? How we build infrastructure. How we utilize infrastructure
01:13:54> 01:13:57:	and the nature of transportation and mobility in general?
01:13:59> 01:14:03:	Well, we had this conversation a lot about.
01:14:04> 01:14:09:	About electrification and about you, know, autonomous vehicles, I think
01:14:09> 01:14:14:	that the the city where everybody finds it easy, convenient
01:14:14> 01:14:18:	and inexpensive to take a car trip is not a
01:14:18> 01:14:22:	great city. And so I'm a little concerned about that
01:14:22> 01:14:27:	there. There have been some studies done. One in particular
01:14:27> 01:14:31:	I'm thinking of in the Bay Area where they tried
01:14:31> 01:14:34:	to stimulate the trick, taking that.
01:14:34> 01:14:37:	People would make if they had an autonomous vehicle by
01:14:38> 01:14:42:	basically providing households with a driver, a car and a
01:14:42> 01:14:45:	driver. So like the trip making went at 60%
01:14:45> 01:14:48:	right and a lot of people use the car and
01:14:48> 01:14:51:	driver to pick up and deliver things and they never
01:14:51> 01:14:53:	stepped into the car.

01:14:54> 01:14:58:	So I'm a little concerned about about, you know about
01:14:58> 01:15:01:	how that is a shiny thing, and you know a
01:15:01> 01:15:04:	shiny future object that my people kind of forget about
01:15:05> 01:15:09:	the importance of making cities that are livable, walkable, and
01:15:09> 01:15:13:	convenient for people who want to, you know, use what
01:15:13> 01:15:16:	you know has to be considered the fountain of youth,
01:15:16> 01:15:20:	right? Being able to walk and get your daily exercise
01:15:20> 01:15:24:	just by living your life, not having to spend hours
01:15:24> 01:15:25:	at the gym, but.
01:15:25> 01:15:28:	Being able to you know, to walk to meet a
01:15:28> 01:15:31:	lot of your daily needs is that it's a great
01:15:31> 01:15:34:	way to, you know to stay, you know, to stay
01:15:34> 01:15:37:	healthy and and engage in your community. I also don't
01:15:37> 01:15:40:	love the city where everybody in it is in a
01:15:40> 01:15:44:	vehicle behind a tinted screen and you know, like how
01:15:44> 01:15:47:	do you know your neighbors? How do you know if
01:15:47> 01:15:50:	you're the lone person out by yourself? How do you?
01:15:50> 01:15:53:	How? How are you safe? So I think I think
01:15:53> 01:15:56:	it's a technology that is absolutely coming.
01:15:56> 01:15:58:	But I think for those of us who care about
01:15:58> 01:15:59:	place making, we have to keep our eye on the
01:16:00> 01:16:00:	ball.
01:16:01> 01:16:03:	Agreed upon your thoughts, and then I'll chime in on
01:16:03> 01:16:03:	my own.
01:16:05> 01:16:08:	So what we observe is starting to learn from the
01:16:08> 01:16:13:	Scandinavian model. So for example, in Helsinki even ten years
01:16:13> 01:16:16:	ago, if you have a transit pass that give you
01:16:16> 01:16:19:	the token to car share, in other words, the city
01:16:19> 01:16:23:	early on, they know it's not possible to build all
01:16:23> 01:16:27:	the infrastructure to meet all the trips, so going back
01:16:27> 01:16:31:	to the conversation about autonomous vehicle. So there are some
01:16:31> 01:16:36:	master planning communities and some of the really progressive.
01:16:36> 01:16:40:	On local Transit Authority, they already, you know, been looking
01:16:40> 01:16:42:	at it. But is it possible to do it for
01:16:42> 01:16:46:	on demand but as a shuttle? And it's not meant
01:16:46> 01:16:48:	to use it to have more cars on the road.
01:16:48> 01:16:52:	I think from the economic or technical design standpoint this
01:16:52> 01:16:57:	can potentially provide a very creative solution. For example,

o1:16:57 --> 01:17:01: you design your transit routes without worrying about some of the hot infrastructure? That is very costly. For example, you o1:17:05 --> 01:17:06: may not need a track.

01:17:06 --> 01:17:09: But you need to test enable the root is.

01:17:13 --> 01:17:17: different speed like? In other words, it can really filtrate

01:17:17 --> 01:17:21: to the existing neighborhood where it's very hard for anybody

Is it possible to design that to go at a

**01:17:21 --> 01:17:25:** to start from scratch. And then lastly, I want to

01:17:25 --> 01:17:29: share a thought about the future. I think City should

01:17:29 --> 01:17:32: start thinking about how to address the non work commute

**01:17:32 --> 01:17:37:** like. In other words, there's a tremendous opportunity looking

at

01:17:37 --> 01:17:40: the transit system. Can you not create a point of

**01:17:40 --> 01:17:41:** destination?

01:17:10 --> 01:17:13:

**01:17:42 --> 01:17:47:** That provide a collective experience. In other words, create

the

**01:17:47 --> 01:17:51:** reason that people would use transit not just for commute

01:17:51 --> 01:17:55: but for other purposes, and I think that in turns

01:17:55 --> 01:17:59: is important of having these mixed uses. Having a different

01:17:59 --> 01:18:04: way of living, and also I think equalizing also diversifying

**01:18:04 --> 01:18:06:** where urban can happen.

**01:18:07 --> 01:18:09:** I think that's great and and I think we'll probably

01:18:09 --> 01:18:12: have time after I give my thoughts on this subject

**01:18:12 --> 01:18:14:** for one more question. So if anyone from the audience

**01:18:14 --> 01:18:17:** has something, please do. Otherwise we'll line up one last

**01:18:17 --> 01:18:20:** one you know. I think what we're recognizing Harry? You

**01:18:20 --> 01:18:23:** really pointed to this. You know, it's it's not the

01:18:23 --> 01:18:26: driver that's the issue, right? It's the vehicle itself, and

01:18:26 --> 01:18:28: that's not to say cards are bad, right? Everything has

01:18:28 --> 01:18:31: its place. It's just sort of overbuild at some point

**01:18:31 --> 01:18:33:** or or get skewed as a society. But in terms

**01:18:33** --> **01:18:36**: of the vehicle, it's the size and the space that

**01:18:36 --> 01:18:36:** it takes up both.

**01:18:37 --> 01:18:40:** When it's driving and when you're storing it right for

01:18:40 --> 01:18:43: parking, it's emissions and right recent studies in terms of

01:18:43 --> 01:18:47: the rubber emissions just from, it's not just switching to

**01:18:47 --> 01:18:50:** electric, that's going to be a panacea, but what I

**01:18:50 --> 01:18:52:** see is is maybe a flip side to to what

01:18:52 --> 01:18:56: you would point to Harriet, which is somewhat dystopian and

01:18:56 --> 01:18:59: we have a lot of those potential futures out there

**01:18:59 --> 01:19:01:** in terms of I see two things I see, one

01:19:01> 01:19:05:	autonomous vehicles continuing the shift away from a prior visit,
01:19:05> 01:19:07:	private vehicle ownership.
01:19:07> 01:19:10:	To subscription models that are based on your use and
01:19:10> 01:19:12:	need for use patterns, and you know a consumer is
01:19:12> 01:19:15:	going to, then you know pay for what they want
01:19:15> 01:19:17:	and can use. Certainly a bulk of us that don't
01:19:17> 01:19:20:	just have unlimited funds and and maybe that sort of
01:19:20> 01:19:23:	curtail some of those needless trips. But we started with
01:19:23> 01:19:26:	the lease right which took some away from the. You're
01:19:26> 01:19:28:	basically renting a car for a period of time and
01:19:28> 01:19:31:	you see some of these subscription models already, even in
01:19:31> 01:19:35:	amenities for some communities that are being built. I think
01:19:35> 01:19:37:	the real key here is I think we're going to
01:19:37> 01:19:37:	see with.
01:19:37> 01:19:41:	AVG Technologies sort of lack a lack of distinguishing between
01:19:41> 01:19:45:	public and private transportation, and what do I mean? There
01:19:45> 01:19:49:	will always be a need for that high throughput. Basically
01:19:49> 01:19:52:	the train or the bus, whether it's bus, rapid transit
01:19:52> 01:19:56:	or otherwise, but larger vehicles that can simply take far
01:19:56> 01:19:59:	more people from point A to point B. But especially
01:19:59> 01:20:02:	in these suburban regions, so many people don't live near
01:20:02> 01:20:05:	a point A or a point B. And what I
01:20:05> 01:20:08:	think we're going to see is those right of ways.
01:20:08> 01:20:10:	Will still be gold, they just may not need tracks
01:20:10> 01:20:13:	anymore to your point of one, it might just be
01:20:13> 01:20:16:	a lot less expensive. Whether it's the build a new
01:20:16> 01:20:18:	route, you still need the right of way, but you
01:20:18> 01:20:21:	can take part of a build highway. It might not
01:20:21> 01:20:24:	be the perfect scenario and sort of utilize that for
01:20:24> 01:20:28:	mass transportation and that public transportation where you're talking about
01:20:28> 01:20:31:	that last mile, which could be last three or five
01:20:31> 01:20:34:	miles. Even in some suburbs and exurbs where you have,
01:20:34> 01:20:36:	maybe you know a 6 to 10 person or even
01:20:36> 01:20:38:	a four person more micro mobility.
01:20:38> 01:20:40:	Type of A V that picks up people within a
01:20:40> 01:20:44:	neighborhood brings them to that sort of 1 common transit
01:20:44> 01:20:47:	hub, and then either literally ties together where you don't
01:20:47> 01:20:50:	get out of that vehicle, or you walk out and
01:20:50> 01:20:52:	you get on to what would be the train today.
01:20:52> 01:20:55:	So I do see that there are possibilities where we

01:20:55> 01:20:59:	can see decreased emphasis on ownership and also a blending
01:20:59> 01:21:02:	of what is public or private, so we'll finish off
01:21:02> 01:21:04:	and this is something that's dear to me as a
01:21:04> 01:21:07:	developer and we had talked about you, had a slide,
01:21:08> 01:21:08:	Yvonne.
01:21:08> 01:21:11:	I believe it was you that talked about the timing
01:21:11> 01:21:14:	of infrastructure and the timing of development. You know how?
01:21:14> 01:21:18:	What role do the real estate developers, the private sector
01:21:18> 01:21:20:	play you know as opposed to just sort of waiting
01:21:20> 01:21:24:	around or building where existing infrastructure is? How does that
01:21:24> 01:21:27:	public and private sector work together that you will I
01:21:27> 01:21:30:	we focus so much on what the private sector can
01:21:30> 01:21:33:	do? Because there are simply opportunities that might not exist
01:21:33> 01:21:36:	in the public sector. And then when we talk about
01:21:36> 01:21:39:	the power of P3 and public private partnerships?
01:21:39> 01:21:43:	Really expands those opportunities, so would love to hear both
01:21:43> 01:21:46:	of y'all's thoughts on how the private sector and the
01:21:46> 01:21:49:	development community plays into some of this where we have
01:21:49> 01:21:53:	long term plans for infrastructure and those don't certainly go
01:21:53> 01:21:57:	by the timelines of your IRR driven development. You know,
01:21:57> 01:21:58:	private sector experience?
01:21:59> 01:22:02:	So I think I can share from the Toronto greater
01:22:02> 01:22:05:	region perspective right now there is a huge need for
01:22:05> 01:22:08:	housing, but in order for housing to happen, that means
01:22:08> 01:22:09:	cities.
01:22:09> 01:22:12:	Are interested to work with developer with the intent to
01:22:12> 01:22:12:	build.
01:22:13> 01:22:17:	Lay in other words, clearly communicate early on your timeline.
01:22:17> 01:22:21:	Is it two years? Is it three years? Is it
01:22:21> 01:22:24:	four years? What is the scale trying to reduce as
01:22:24> 01:22:28:	much as certainty as possible? I think there are two
01:22:28> 01:22:32:	Model 1 model is that I create a condition for
01:22:32> 01:22:35:	developer to upsizing the infrastructure.
01:22:36> 01:22:40:	And making that as a very straightforward way to make
01:22:40> 01:22:43:	it happen. I think that's very important.
01:22:44> 01:22:48:	This is a model that has been experimenting in some
01:22:48> 01:22:51:	part of the region but hasn't been taking it a

01:22:51> 01:22:55:	broad scale and I think now is the opportunity to
01:22:55> 01:22:58:	yeah to to to capture that new new way
01:22:58> 01:22:59:	of delivering.
01:23:00> 01:23:02:	Excellent any thoughts Harriet?
01:23:04> 01:23:05:	I think that.
01:23:06> 01:23:10:	But infrastructure and development both have really large
	timelines and
01:23:10> 01:23:12:	long timelines, and I think that.
01:23:14> 01:23:17:	You know that in some ways long is good, especially
01:23:17> 01:23:21:	if what you're trying to do is get out ahead
01:23:21> 01:23:25:	of displacement threats and to do things to try to
01:23:25> 01:23:30:	ensure that the promise of coming infrastructure you know doesn't
01:23:30> 01:23:34:	raise property values so much that the people that the
01:23:34> 01:23:38:	infrastructure is intended to serve can't afford to be there.
01:23:39> 01:23:42:	So I know you guys have talked before about the
01:23:42> 01:23:44:	11th St Bridge project.
01:23:44> 01:23:47:	As an example, that's another local one for us here
01:23:47> 01:23:50:	in Washington, but it's you know it's been more than
01:23:50> 01:23:53:	10 years with that project has been in development, but
01:23:53> 01:23:56:	in the meantime they've spent the same amount as they're
01:23:56> 01:24:00:	spending on the infrastructure in Community investment,
	community development, and
01:24:00> 01:24:03:	it, and that long time frame has really been fruitful
01:24:03> 01:24:06:	year. So I've started to have a different perspective about
01:24:07> 01:24:09:	what you can do with the time that you had
01:24:09> 01:24:10:	it, and it's not always bad.
01:24:11> 01:24:14:	That's that's great. Really appreciate it. You know, Paul, I
01:24:15> 01:24:17:	don't know if you want any closing comments, but I
01:24:17> 01:24:20:	just want again. Wanna thank Harriet and Evan and you
01:24:20> 01:24:22:	know if we can all give them sort of a
01:24:22> 01:24:24:	a virtual or real a round of applause there some
01:24:24> 01:24:28:	really great information we could continue this conversation, but we
01:24:28> 01:24:31:	are cognizant of the time and want to get everyone
01:24:31> 01:24:33:	out. As we promised Paul any closing thoughts on this?
01:24:33> 01:24:36:	This has been really fun so very very true. Thanks
01:24:36> 01:24:38:	to you all and and you a lot for this
01:24:38> 01:24:39:	platform well.
01:24:39> 01:24:42:	Thank you for moderating, Brandon. Thank you to Harriet.
01:24:42> 01:24:44:	Thank you to Yvonne. So much for speaking. I really
01:24:44> 01:24:47:	appreciate it. The questions from the audience and just let
01:24:47> 01:24:50:	you know that our next session is going to be

**01:24:50 --> 01:24:52:** in August 18th to focus on the this very small **01:24:52 --> 01:24:55:** issue of climate change. And so it's going to be

**01:24:55 --> 01:24:57:** a really big conversation. Really, one of your input and

**01:24:57 --> 01:25:00:** thank you so much for joining and and see you

**01:25:00 --> 01:25:00:** all.

**01:25:00 --> 01:25:01:** In a couple months.

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